

The Antiquary.



NOVEMBER, 1896.

Potes of the Wonth.

THE fact that a monthly magazine such as the Antiquary has to go to press in the middle of each preceding month, made it impossible for us to record in the number for October, that on the twenty-third day of September Her Most Gracious Majesty Queen Victoria had reigned for a longer period than any of her predecessors. Although this auspicious event has of late been in everyone's thoughts, we feel that it ought not to pass unrecorded in these Notes. An epoch has been marked in English history, and if for no other reason the Antiquary would desire to record it. Irrespective of any such consideration, however, it is only proper that we should offer the dutiful homage of our readers to their Sovereign. We desire to re-echo the cries of acclamation which greeted the Queen at the Inthronization in the abbey church of Westminster on June 28, 1838: "God save Queen Victoria! Long live Queen Victoria!" That their revered Sovereign may yet be spared for many years to reign over them, is the sincere prayer of all her loyal and grateful subjects.

With reference to the length of the Queen's reign, alluded to in the preceding Note, a correspondent of the *Times* has called attention to the fact that, had the son of James II. succeeded to the throne, his reign might have been the longest on record: "As James II. died on September 6, 1701, and his son on January 1, 1766, the length of the VOL. XXXII.

reign of the latter, if he had become King of England, would have been 64 years and 117 days, from which, however, 11 days should be deducted, the year 1752 being that amount short owing to the alteration of the calendar." The writer (who signs his initials as R. S. H.) adds: "In mentioning long reigns, it should also be remembered that James I. reigned, as James VI. of Scotland, for 57 years and 8 months over that kingdom, though he succeeded to the crown as quite an infant."

The longest European reign was that of Louis XIV. of France, who reigned for 72 years; he and his grandson Louis XV. together reigning for rather more than 130 years, from 1643 to 1774! Much might be said as to other lengthened tenures of office. One, perhaps, of the most remarkable was that of the late Dr. Bromby, who for 72 years was vicar of Hull. When it is borne in mind that a clergyman must be at least twenty-four years of age to start with, such a record is all the more remarkable. Perhaps in this connection we may allude to Pope Leo XIII., who, having been consecrated bishop in 1846, has now become the senior bishop of the entire Roman Catholic This is a distinction which it episcopate. is believed has never before been attained by any other Pope. Ad multos annos!

The British Museum has recently acquired a very fine mediæval ewer of latten or bronze. Round the centre of the vessel is engraved an English inscription in Lombardic lettering of the beginning of the sixteenth century. The ewer is a remarkably good specimen of English mediæval founder's work. What, however, is of almost as much interest as the ewer itself is the place where it was found and whence it was brought. This is none other than Ashantee, the ewer being part of the spoil taken from King Prempeh during the late expedition! How it had found its way to such a place baffles the imagination to conceive, and its discovery in Ashantee seems more like an item from some story by Mr. Rider Haggard than a plain fact, which nevertheless it is.

Mr. Thomas May, of Warrington, has very kindly sent us a photograph of a Roman

altar, which he has been so fortunate as to find near that town. In sending the photograph, Mr. May says that during the recent removal of some surface soil in preparation for excavating sand for building purposes, the altar was unearthed on the site of the supposed Roman station of Veratinum, a few yards to the west of the Roman road, of which a fine section, 40 inches thick, is exposed. The site in question, which is plentifully impregnated with fragments of pottery and other Roman remains, is at Wilderspool, on the south or Chester side of the River Mersey, but just within the new boundary of the borough of Warrington. Mr. May was examining the stones dug from what had evidently been a trench, where the soil was darker in colour and 2 or 3 feet deeper than elsewhere, when he observed a block that had been thrown down the bank for edging the cart-track to be of regular oblong shape. When the soil adhering to all parts of its surface had been partly removed, Mr. May came upon rough carving, and on scraping the sand and dirt from one end discovered the focus, and recognised the nature of the find-a Roman altar.

The altar is composed of the soft red sandstone of the locality, and unfortunately no trace of an inscription can be found upon it. The corners are rounded by weathering, but it is quite perfect except where a small fragment was broken off the left front corner of the base by rough handling when it was thrown down the bank. The back of the stone is undressed, showing that it was intended to be set against a wall. Mr. May proceeds to say: "It may be described as consisting of three well-proportioned features, a capital, shaft, and base. The capital measures 121 inches in length, 81 inches in breadth, and 54 inches in height; the shaft is 94 inches high, 11 inches wide, and 81 inches thick; the base is about 14 inches long, 103 inches broad, and 6 inches high. The total height is therefore only $20\frac{1}{2}$ inches. . . . The focus occupies its invariable position near the middle of the summit, but it is rather nearer the back of the stone in this instance, and is merely an incised ring of 21 inches inside and 31 inches outside diameter. There are also, by way of ornament, two round bosses

on the front corners of the summit. The front of the capital is formed by three round mouldings separated by deep grooves, and diminishing proportionately downwards. There is a rude carving in high relief on the right side of the shaft to represent the prefericulum or ewer used for containing the wine for libations. This altar, though a somewhat rude and diminutive specimen, is the only one that has been obtained from the station, and will no doubt be highly prized. The right of discovery and rescue entitles me to some say in regard to its disposal, and I shall do my utmost to secure it for the local museum, as an addition to a very valuable collection of Roman remains from the same locality."

In the current number of Archaelogia Æliana an early photograph of the Quayside at Newcastle-upon-Tyne, taken before it was destroyed by the fire of 1854, is reproduced as a plate by the collotype process. most interesting old photograph prompts us to repeat what we have said before, that all local antiquarian societies should at once set to work to secure old photographs of destroyed or "restored" buildings before it is too late to do so. The archæological value of many of these historical photographs is simply incalculable, but unfortunately it does not seem to be as widely appreciated as it Of how many a "restored" or should. rebuilt church is not some old photograph yet in existence the only record or memorial! The systematic collecting of old photographs seems to us to be at the present moment, as urgent a matter as the photographic surveys which are happily in progress in many parts of the country. Without, however, interfering with the surveys we most earnestly emphasize the urgent necessity for collecting old and historical photographs as well. Both should form part of one scheme.

Baron de Baye has been occupied for some months past in the neighbourhood of Tomsk, Siberia, in excavating the "kurgans," or turtle-back burying mounds found in many parts of Russia. Fifteen "kurgans" have been opened, and a curious and significant discovery made. Those mounds, which date back to before the Russian conquest of

Siberia, contain beads, earrings, knives with artistically-finished bone hafts, copper kettles, engraved rings, and silver ornaments, bracelets, etc. The oldest of these belong to the thirteenth century. Those mounds, on the other hand, which date only from about three centuries ago (Tomsk was founded in 1604) contain comparatively little of anything, hardly any articles of metal, except a few of the rudest form of wire rings and earrings, and for the most part arrowheads, knives, buckles, etc., of bone, showing a much poorer stage of civilization.

The members of the Yorkshire Archæological Society, under the guidance of Mr. W. H. St. John Hope, held a very successful meeting in September at Mount Grace Priory. Mount Grace was one of the nine Carthusian monasteries in England of which the names and dates of foundation are: Witham (Somerset), 1181; Hinton (Somerset), 1227; Beauvale (Notts), 1343; London, 1371; Kingston-on-Hull, 1378; Coventry, 1381; Epworth (Lincolnshire), 1396; and Shene (Surrey), 1414; Mount Grace itself having been founded in 1397 by Thomas Holland, Duke of Surrey. The most notable feature of the Carthusian Order, as is well known, was that the monks did not live together, as in other orders, in the cloister and dorter, but each had his own cell or small house where he lived, and worked, and prayed by himself, and which he never quitted, but on the greater solemnities and festivals, except to go to vespers, matins, and mass in the church. The cells or houses were arranged round three sides of the great cloister, the fourth side being occupied by the church, frater, etc. At Mount Grace alone, in England, these arrangements are still to be seen. Since the previous visit of the society to Mount Grace in 1882 the ruins have been almost entirely freed from ivy and other noxious plants, and during the spring of the present year the excavations carried out by Mr. Brown (the owner) and Mr. W. H. St. John Hope have brought to light a number of interesting features. The eastern part of the church has been cleared out, disclosing the base of the high altar, and on the south side of the choir have been uncovered the walls of a side chapel containing the bases

of a tomb and two altars. The chapter house has also been found and cleared, and the sacrist's house identified and partly ex-Some interesting remains have also been opened up on the west of the church, and three of the houses on the north side of the great cloister have been freed from accumulations of rubbish. Before the members were conducted round the priory by Mr. Hope, a paper which gave a very clear and important account of the daily life of a Carthusian monk was read by Mr. J. T. Micklethwaite, whose profound knowledge on all such subjects is well known. We may add that the Yorkshire Archæological Society proposes to continue the work of excavation at Mount Grace, and the council of the society solicits the aid of antiquaries and others towards the fund which is being raised for this important work. Considering that Mount Grace is the only Carthusian monastery in England of which any considerable remains are left, the importance of the work is at once manifest. Any readers of the Antiquary who may desire to contribute to the fund, should send their subscriptions to the treasurer of the society, Mr. H. S. Childe, Holmegarth, Wakefield.

Speaking of the Yorkshire Archæological Society, we are sorry to learn that Mr. J. W. Walker intends to resign the post of honorary secretary (which he holds jointly with Mr. Brown) at the end of the present year. Mr. Walker's medical practice does not leave him sufficient leisure to attend as fully as he thinks he ought to do to the concerns of the society. His retirement will be much regretted by the members of the society. The society has just entered into its new premises at the old Medical School in Leeds.

At a recent meeting of the Society of Antiquaries of Newcastle-upon-Tyne it was decided to hold an exhibition of ecclesiastical and secular plate made at Newcastle, bearing the hall-mark of the goldsmiths' company of that town. The exhibition will be held early in May next, in the museum in the Black Gate in the Castle Garth, under the patronage of the Bishops of Durham, Newcastle, Richmond, and others. Many of the clergy and churchwardens in the north

have already promised their support and the loan of their church plate, the counties of Northumberland, Durham, Cumberland, Westmorland, and Yorkshire being particularly rich in the possession of pieces of church plate bearing the Newcastle mark. A committee has been appointed to attend to the details of the exhibition, and circulars are being issued soliciting the active cooperation of the clergy and laity in the north. It is believed that this is the first attempt to get together selected specimens of the work of each member of any provincial goldsmiths' company, but it is hoped that the idea may be followed up in other districts. Of church plate bearing the Newcastle hallmark much has been promised, but specimens of secular plate of early date are rare, and it is earnestly hoped that all persons who possess pieces of plate bearing the hallmark of one tower, or of a shield with three towers, will communicate with the committee. Such communications should be addressed to R. Blair, Esq., F.S.A., Secretary of the Newcastle Society of Antiquaries, Newcastleupon-Tyne.

All lovers of English ceramic art will be glad to learn that Messrs. Bemrose and Sons have announced a subscription volume on The Swansea and Nantgarw Porcelain Works. The author of this promised work is Mr. William Turner, who has devoted many years to the study of the subject; and a paper read by him before the Cardiff Naturalists' Society in 1889 upon Nantgarw porcelain, gives ample assurance that the forthcoming book will not only be thorough, but will be pleasant and interesting reading to the general reader. Welsh porcelain has hitherto been a neglected corner of British industrial art, but Mr. Turner's book promises to be to it what Haslam's is to Derby, Binns's is to Worcester, and Owen's is to Bristol. Such a work will naturally find a wide sale in South Wales, but assuredly it will also commend itself to all who are interested in Derby porcelain, for these Welsh factories mainly owed their existence to the skill and enterprise of Derby hands. The new book will contain a considerable number of plain collotypes, and a few coloured collotypes to illustrate the style and mannerism

of the various artists; by this means the author hopes to safeguard the collector against the numerous false pieces which of late years have been in the market.

Under the heading of "Vandalism" Mr. Harry Henis, of Exeter, sends us the following extract from The Church in the West for September 19, 1896: "What do you say to the possession, at Bideford, of the bust of John the Baptist, by Dornatello, an artist who died over 400 years ago? The bust has been in the hands of Mr. Friendship for some years. It was sold at a sale by auction to Mrs. Friendship for the sum of 18s., and, on taking it home, her husband washed the figure with soap and water, and, after the most persevering trouble, he brought to light the beautifully modelled and painted representation alluded to. It at one time stood on a bracket in the Buck or Stucley pew in the Bideford church. when the church was restored it was removed by the builder with a lot of valueless things, and was retained by him until he died, when it was sold, as stated, to Mrs. Friendship. The theory is that Sir Richard Grenville, who fought the Spaniards, became possessed of the figure, brought it to Bideford, and gave it to the Rev. Theobald Grenville, who was then rector of Bideford. The same owner has also the head, on a bracket, of the Rev. Theobald Grenville, beautifully carved in oak. Also a fine head of Sir Richard Grenville, and several pieces of splendid oak carving, all of which came from Bideford Church. He has also the cover of the font which Cromwell's soldiers carried out of the church and allowed the swine to eat out of. These are relics which are fully authenticated, and in that respect, at any rate, are more interesting than the longtalked-of-guns." Mr. Hems wants to know (and other people will share his desire in this respect) how the church authorities at Bideford came to part with these objects.

Mr. Batsford, of High Holborn, is about to publish a work on *Choir Stalls and their Carvings*, by Miss Emma Phipson. The volume will contain 300 examples of misericords, etc., reproduced on 100 plates from original drawings. It is believed that in the fragmentary literature already existing on this

subject, only a small number of the examples to be included in Miss Phipson's work have been hitherto dealt with. The subject is one which calls for more adequate treatment than it has yet received, and we have much pleasure in calling attention to the work now in course of preparation.

We are asked to state that the first part of the List of Private Libraries compiled by Mr. G. Hedeler, of Leipzig, will be ready in December. It includes more than 500 important private collections in the United States of America and Canada. The statements as to the number of volumes and the principal features of the separate collections have been furnished, almost without exception, by the owners themselves. An index of subjects enables the reader to determine at a glance which collectors devote themselves to each of the specialties indexed. The second part, now being prepared, will contain a record of about the same number of the larger private libraries in Great Britain. Any possessors of libraries with whom Mr. Hedeler has been unable to communicate are requested to furnish him with details as to the nature of their treasures, and the special characteristics of their libraries. It is obviously to the interest of all bibliographical students that a work of this kind should be as complete as possible.



Early Wechanical Carriages.

BY RHYS JENKINS.

No. IV .- STEAM CARRIAGES (Continued).

N dealing with Watt and Murdoch in the preceding article reference was made to William Symington. Symington is better known in con-

nection with the origin of steam navigation, but he took up that branch of the subject only after having become convinced of the difficulties attending the propulsion of road vehicles by steam power; he had, in fact, exhibited a model steam carriage (Fig. 1) in Edinburgh in 1786. His son-in-law tells us:*

* R. Bowie: A Brief Narrative, Proving the Right of the Late William Symington to be considered the

"As early as the year 1784, amidst the wild, bleak scenery of the country he inhabited (Lanarkshire), and when he knew nothing of any attempts which might have been made to realize such an idea, it occurred to him that steam might be rendered available for the propulsion of locomotive carriages. He immediately set about embodying his idea, and in 1786 submitted to the inspection of the professors and other scientific gentlemen in Edinburgh a working model of a steam carriage, which afforded such proofs of capability that he was warmly urged by all present to carry his invention into full effect.

"But with a sense of honour, which redounds to his credit, he would not allow his friendly advisers or his patron, Mr. Meason, to embark in an undertaking to which the state of the roads in Scotland, and the difficulty of procuring fuel and water, presented, in his opinion, insurmountable objections. Besides, he was the more easily induced to abandon his experiments on land carriage by a belief in a possibility of more advantageously employing steam for the purposes of navigation."

Referring to the figure, it will be seen that the boiler and engine are mounted upon the axle of the hind wheels. There is a single cylinder, the piston rod of which is coupled directly to a rack extending along one side of the boiler and, by means of a chain passing over pulleys, to a similar rack at the other side of the boiler. These racks gear with corresponding toothed wheels loose upon the hind axle, but which carry it around when moving in one direction by means of ratchet wheels and pawls. The engine thus exerts its power alternately upon opposite ends of the axle, and both strokes are utilized to produce forward motion of the carriage. The engine is fitted with a condenser, from which water is supplied to the boiler. Of the ultimate fate of this interesting model the writer has no information. If in existence it would form a valuable addition to the National Collection at South Kensington.

Another inventor of this period of whom very little has been heard is Robert Fourness of Elland, Halifax, who, in 1788, obtained a patent, in conjunction with James Ashworth, for a road-locomotive intended for drawing vehicles. There are many points of interest in this machine; it had a three-cylinder vertical non-condensing engine, the shaft of which drove the hind axle by means of cogwheels, and the exhaust steam from the engine was directed into the water tank and

Inventor of Steam Land Carriage Locomotion, and also the Inventor and Introducer of Steam Navigation. London, 1833.

served to warm up the feed water. Although in an account of this machine supplied to one of the engineering journals,* by a Mr. Fourness, presumably a descendant of the inventor, a drawing, obviously prepared from a model, is given, it appears very doubtful whether the latter ever carried the invention into effect; there is some reason to think that Fourness and Ashworth, like Symington, turned their attention more to the application of steam power to the propulsion of ships, for which also they obtained a patent in the same year.

The name of the celebrated American mechanic, Oliver Evans, is one that is indissolubly bound up with the history of a small engine for lifting the mud, he caused the same to propel itself from his works to the riverside by fitting it with road wheels, which were connected by gearing to the little engine on board; the speed of progression was necessarily low, but the experiment appears to have been a complete success.

Another American inventor, Nathan Read, is considered to have made a model steam-carriage in 1788-89. In 1790 he applied to Congress for a patent for his invention, and although the application appears to have fallen through, the specification and drawing have fortunately been preserved.*

Read proposed to use two double-acting steam engines, the piston-rods of which

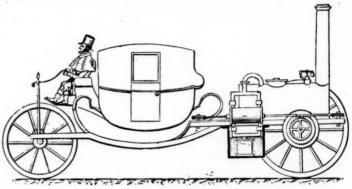


FIG. 1.—SYMINGTON, 1786.

steam-carriages-not, indeed, that he ever constructed one, but he was, nevertheless, a firm believer in their practicability, and for a number of years strove to induce capitalists to embark upon the enterprise. He appears to have first considered the subject during his apprenticeship, about the year 1772. In 1786 he petitioned the legis-latures of Pennsylvania and Maryland for patents for his flour mills and steam-waggons, and in 1801 or 1802, finding it impossible to get a partner in the enterprise, he commenced alone at the construction of a steam-carriage. This attempt was, however, soon abandoned, the constructor finding that his energies could be more profitably utilized in other directions. However, in 1804, having built a flat or lighter for cleansing docks, which was provided with

* The Mechanical World, July 22, 1892.

carried racks in gear with pinions secured to the hind wheels, so that there was one engine for each wheel. Either engine could be used separately to cause the carriage to turn to one side or the other. With the idea of assisting the motion of the carriage the exhaust steam was directed backwards. Read proposed to employ his multitubular boiler, and this in itself was a most important step forward, as without some construction of the sort it is absolutely impossible to secure sufficient steam generating power within the limits of weight allowable in a road vehicle. Altogether Read's carriage appears to have been well thought out, and it is not a little

^{*} They are reproduced, together with accounts of Read's other inventions by D. Read, in Nathan Read: his Invention of the Multitubular Boiler, etc. New York, 1870.

remarkable that his ideas remained in obscurity for such a length of time as they did.

Nothing in the way of steam-carriages appears to have been done in France between Cugnot's time and 1830, when several carriages were constructed by Dietz and others, although in 1803 one Sieur Dallery obtained a patent, "Pour un bateau à hélice et une voiture à vapeur marchant sur routes ordinaires," in the specification of which is shown a curious boat-shaped carriage driven by a steamengine.

Trevithick, perhaps the greatest inventive genius that has ever appeared in this country, commenced his labours at the locomotive, of which he of all others is entitled to be styled the father, with attempts upon ordinary roads. In 1706 and the following years he appears to have constructed several models; one of these is still in existence, and may be seen at the South Kensington Museum. It is mounted on three wheels, and has a horizontal cylindrical boiler, in which is to be remarked the curious feature that heat is supplied by a heated iron, just as in a box smoothing-iron. The cylinder is vertical, and is placed partly in the boiler. The piston-rod carries at its upper end a cross-head sliding in guides and having end journals for the connecting-rod, which descend to crank-pins in the two hind wheels. A fly-wheel mounted on a studspindle is connected to one of the wheels by spur gearing. In 1800-1801 Trevithick constructed his first full-sized engine, which made its trial trip on Christmas Eve, 1801. The following account of that trial by a resident of Camborne has appeared in various places, but no apology is needed for repeating it here:

"In the year 1801, upon Christmas Eve, towards evening, Captain Dick (Trevithick) got up steam out in the highroad, just outside the shop at the Weith. When we see'd that Captain Dick was a-going to turn on steam, we jumped up, as many as could—maybe seven or eight of us. 'Twas a stiffish hill going from the Weith up to Camborne beacon, but she went up like a little bird. When she had gone about a quarter of a mile, there was a roughish piece of road, covered with loose stones. She didn't go quite so fast, and as it was a flood of rain, and we were very squeezed together, I jumped off. She was going faster than I could walk, and went on up the hill about a quarter or half a mile further, when they turned her, and came back to the shop."

In 1802 Trevithick, in conjunction with a relative, Andrew Vivian, took out a patent, covering, among other things, his steam-carriage. The specification describes an engine (Fig. 2) with a single horizontal cylinder fixed in a horizontal boiler, which is shown underneath a carriage of ordinary design. The piston-rod is forked, to pass

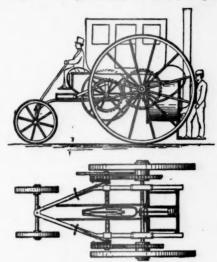


FIG. 2.—TREVITHICK, 1802.

over the crank-shaft, which it works by a return connecting-rod. Gearing with spurwheels on the naves of the main road wheels are loose spur-wheels on the ends of the crank-shaft, to which they are connected by arms on the latter engaging with pins on the former. The said arms may be moved in and out of gear by hand-levers.

After describing the drawings, the specifica-

tion proceeds:

"... It is also to be noticed that in certain cases we make the external periphery of the road wheels uneven by projecting heads of nails or bolts, or cross grooves, or fittings to railroads, when required, and that in cases of hard pull we cause a lever bolt or claw to project through the rim of one or both of the said wheels, so as to take hold of the ground; but that in general the ordinary structure or figure of the external surface of these wheels will be found to

answer the intended purpose. And, moreover, we do observe and declare that the power of the engine with regard to its convenient application to the carriage may be varied by changing the relative velocity of rotation of the road wheels, compared with that of the crank axis, by shifting the gears or toothed wheels for others of different sizes properly adapted to each other. . . . We do occasionally use bellows to excite the fire, and the said bellows are worked by the piston-rod or crank."

In 1802 a locomotive was being built according to Trevithick's plans at Colebrookdale, and in 1803 an engine made very much on the lines of the specification was sent to London, where it was attached to a coach, and run along the streets with a fair amount of success, although it is recorded that on one occasion it tore down a garden wall; it also came in for volleys of cabbage stumps, rotten onions and eggs from coachmen and

others.

Trevithick, however, soon relinquished his attempts at locomotion upon common roads, and turned his attention to railways, and in 1804 he completed the tramway locomotive

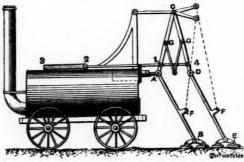


FIG. 3.—BRUNTON, 1813.

at Penydarren, near Merthyr Tydvil; in the same year he was having an engine built at Gateshead-on-Tyne. Four years later he was again in London, running his locomotive on a circular railway upon the ground now forming Euston Square; but he met with so little encouragement that he became thoroughly disgusted with the subject, and in 1809 he appears to have refused an order for a locomotive, stating that he was "engaged"

in other pursuits, and having declined the business could render no assistance."

After Trevithick's time the idea got abroad that the adhesion of plain wheels was not sufficient to propel an engine. Accordingly, in 1812, we find Blenkinsop laying down his rack railway near Leeds, and, what is more closely connected with the present subject, in 1813 we have Brunton with his "Mechanical Traveller." The most curious piece of engineering is represented in Fig. 3. The engine is propelled by a pair of legs, to which is given a motion resembling walking. piston-rod A in its outward movement forces out the leg and foot B, which pushes behind, but as the foot is fixed against the ground, it cannot move back; the engine is therefore caused to advance. At the same time, the movement of the piston-rod, reversed by means of a pinion and racks upon the top of the boiler, draws in the other foot E, which is lifted clear of the ground by means of leather straps and levers. Upon the reversal of the movement of the piston, the leg E acts as the pusher, and B is drawn in. machine was employed at the Butterly Iron Works, but came to an untimely end in consequence of the boiler exploding when at work.

The period from 1820 to 1840, although a most important and interesting one in the history of steam carriages, embracing as it does the labours of Gurney, Hancock, and Scott-Russell, does not perhaps fairly fall within the sphere of the Antiquary. We shall therefore restrict ourselves to a brief outline of the main features of the steam carriage movement of sixty years ago.*

This movement may be said to commence with the attempt of Julius Griffith of Brompton, who, in 1821-1822, had a carriage built by Bramah, the celebrated engineer and locksmith, which, in spite of the best workmanship of those days, was a complete failure. Part of the mechanism appears to have been invented by one Arzberger, a foreigner.

* The steam carriages of this period, and, indeed, the whole subject of steam locomotion on common roads, is dealt with very fully in Mr. Fletcher's Steam Locomotion on Common Roads, 1891. From which the illustrations in this article are taken.

The Cantor lectures of Mr. W. W. Beaumont, read at the Society of Arts last winter, on "Mechanical Road Carriages," will also be found of great value.

David Gordon, whose name was mentioned in conjunction with that of Murdoch in connection with experiments with compressed aircarriages, was labouring at steam-carriage projects about this time. One of his ideas is the curious arrangement shown in Fig 4, in which the engine is placed inside a sort of squirrel-cage, i.e., a drum 9 feet in diameter formed with teeth inside adapted to gear with teeth on the wheels of the engine. His next scheme was one in which propelling legs were used to forward the carriage, a device already brought into use by Brunton.

Gurney, one of the best known steam-carriage inventors, also commenced his experiments with an arrangement of propelling-legs which practical experience soon demonstrated to be of no value. Gurney made a number of carriages, one of which, belonging to Sir Charles Dance, plied regularly between Gloucester and Cheltenham four times a day for four months in 1331.

Hancock and Scott-Russell also had carriages at work regularly in the public streets. The former, in 1831, established a line of steam-omnibuses between Stratford and London, and in 1834 between the Bank and Paddington, viâ Pentonville. Scott-Russell, in 1834, had a steam-carriage service at work between Glasgow and Paisley. This continued for some time, but came to an abrupt termination in consequence of a boiler explosion, resulting in several deaths.

Besides those named above, there were quite a number of other inventors at work-Burstall and Hill, Anderson and James, Ogle and Summers, Macerond and Squire, Heaton, Church, and others. It is, in fact, recorded that at the end of 1833, there were as many as twenty steam-carriages completed or in hand, in and around London alone. In another place* the present writer has pointed out, as evidencing the great interest taken in the subject in those days, the circumstance that Alexander Gordon's Treatise Upon Elemental Locomotion ran into a third edition in the course of four years, and that the author thereof brought out two special journals, i.e., the Journal of Elemental Locomotion, in 1832, and the Journal of Steam Transport and Husbandry, in 1833. One of the articles in the latter bears the title, "Proposal for Appropriating for the use of the Public Purse the Vast Revenue that will Arise Annually from Internal Elemental Transit."

Quite a number of companies were formed or projected to work these carriages. Mention may be made of the London and Birmingham Steam Carriage Company, 1832; the Paddington and London Steam Carriage Company, 1832; Heaton's Steam Carriage Company, 1833; the London, Holyhead, and

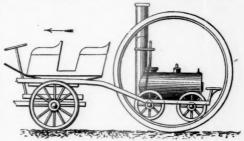


FIG. 4.—GORDON, 1821.

Liverpool Steam Carriage and Road Company, 1834; the Steam Carriage Company of Scotland, 1834; the Hibernian Steam Coach Company, 1834; and the Steam Carriage and Waggon Company, 1838.

But what with the competition of the railways, the difficulties as to tolls, the imperfections of the roads, and, indeed, of the engines themselves, by 1840 all this interest appears to have died out, and the problem of carrying passengers by steam-power on common roads had been abandoned for the time being.

One of the enthusiasts of this period-J. H. Clive-came to the conclusion that "it is impossible to build an engine sufficiently strong to run even without a load, on a common road, year by year, at the rate of fifteen to twenty miles an hour. It would break down. Cold iron, at that speed, cannot stand the shock of the momentum of a constant fall from stones and ruts of even an inch high." George Stephenson, too, held that "steam carriages on ordinary roads would never be effective, or, at least, sufficiently serviceable to supersede horse carriages"; one must make allowance here, of course, for a natural bias in favour of railways. James Watt also thought they were out of the question "unless

^{*} Power Locomotion on the Highway, 1896. VOL. XXXII.

God will work a miracle in favour of these carriages"; here, again, there was a natural leaning to low-pressure condensing engines running at a low speed, which are out of the question on the road. But in spite of these prophecies of failure, there have been many more or less successful experiments carried out since 1840, and, without doubt, had it not been for the restrictions of the Locomotives Acts, which we are now to see removed, a great many more would have been carried

Compressed air has been tried as the motive power for road carriages and tramcars on many occasions, but it is not generally known that the idea goes back to the very beginning of the present century, when George Medhurst, of London, projected a general system of transport on common roads by the aid of motors driven by air, which was to be compressed at convenient stations by windmills, watermills, or by hand. Medhurst endeavoured to form a company with a capital of £50,000 to work this project, but nothing appears to have been done in practice. His patent specifications are very interesting documents: that of 1700 relates to "a condensing wind-engine capable of being applied to all kinds of purposes in which steam, water, wind, or horses are employed." That of 1800 to "a new improved method of driving carriages of all kinds without the use of horses by means of an improved Æolian engine, and which engine may also be applied to various other useful purposes." In the latter he tells us:

"The power applied to the machinery is compressed air, and the power to compress the air I obtain generally by wind, assisted and improved by machinery described in this specification; and in order to render my invention universally useful, I propose to adapt my machinery and magazine so that it may be charged by hand, by a fall of water, by a partial vacuum obtained by wind, and also by explosive and effervescent substances, for the rapid conveyance of passengers, mails, despatches, artillery, military stores, etc., and to establish regular stagecoaches and waggons throughout the kingdom to convey goods and passengers, for public accommodation, by erecting windmills, watermills, etc., at proper intervals upon the roads, to be employed in charging large magazines at these stations with compressed air, or in raising large reservoirs of water by wind, etc., by the power of which smaller portable magazines may be charged, when required, by machinery for that

Small carriages were to be worked by rotary engines, larger carriages by reciprocating engines provided with a special gear for varying the power. Another project of this inventor was the propulsion of carriages by a gunpowder engine. Medhurst published several pamphlets upon his inven-

As we have already noted, Murdoch, who did a lot of work in connection with compressed air, contemplated its application for propelling carriages, and between 1828 and 1832 several inventors were at work on compressed air carriages. Of these it would appear from a paragraph in the Northampton Free Press that a Mr. Fordham, of London, had actually constructed a carriage; he estimated that carriages could be worked by compressed air at fourpence or sixpence a mile as against two shillings for horses. Another of these inventors, W. Mann, of Brixton, published a pamphlet, entitled A Description of a New Method of Propelling Locomotive Machines, and of Communicating Power and Motion to all Other Kinds of Machinery, London, 1830, in which appears a lithograph of the proposed carriage. He therein discusses the pneumatic distribution of power generally, taking as an example the case of the city of Birmingham, the artisans of which "may be supplied with cheap power by means of compressed air, just as they are now supplied with cheap light by means of gas."

In France, Andraud and Tessié du Motay constructed a compressed air carriage to run

upon rails in 1840.

In 1848 the Baron von Rathen was experimenting with a compressed air carriage at Putney.

Somewhat analogous to these schemes was that of Samuel Brown, who constructed a carriage fitted with what he called a "gasvacuum engine." This carriage successfully ascended Shooters Hill in Kent in 1826.

Electric carriages date from that of Davenport, an American, who in 1835 constructed a model, arranged to run upon a circular railway. The first machine intended for practical work was, however, that of Davidson, of Aberdeen, tried on the Edinburgh and Glasgow railway in 1842.

We shall at this point leave the considera-

tion of carriages propelled by inanimate power, and in the next and concluding article revert to those driven by men and animals.



From London to Edinburgh in 1795.

By the Rev. William MacRitchie.
With Notes by David MacRitchie, F.S.A. Scot.

(Continued from p. 307, vol. xxxii.)*

[Thursday, 20th August.] Arrive at Thornton-rail (Colonel Thornton's), formerly the Seat of the Duke of York, finely situated on a rising ground; a fine new garden a little to the south of the house on the declivity of the eminence. At three o'clock P.M. come to Green-Hammerton, where dine. here with a gentleman of Macclesfield in Cheshire, who informs me that about his place land setts [i.e. lets] at eight pounds an acre; knew some there have been offered ten pounds. At Hammerton-green oats sell at present at half a guinea a bushel (Cheshire bushel forty-five pounds). Wheat sold here lately at four guineas per Quarter, equal to eight bushels. Great fall of grain every where in this country of late. The corn-dealers detected in their tricks in endeavouring to persuade the farmers to keep up their grain in hopes of an exorbitant price. Leave Green-Hammerton at four P.M. This gentleman travels with me to York.

In the vicinity of York harvest begun. Oats, barley, wheat, &c. cut down. Fine farming here, and excellent crops. All the turnips of England (almost all I have yet seen) are sown in the broadcast;† the potatoes

* The following corrections were not given effect to in last instalment of this Diary: Page 301, Cynanchica, Libanotis, Caucalis; page 302, Ononis, Calcitrapa, Hedysarum Onobrychis, Otiles; page 303, Sisymbrium sylvestre; page 306, Selago, cæspitosus. Also page 304, "Captains Stewart, McDonald, and McKilligan," and "Messrs. Preston," etc.; and on page 305, footnote, "Allerton Gledhow. Dixon, Esq."

† From this remark one is led to infer that the diariest was converted to see there is sown in drille.

† From this remark one is led to infer that the diarist was accustomed to see turnips sown in drills. The cultivation of turnips in the open fields had only been begun in Scotland about fifty years previously, and the seed had been sown broadcast until 1753, in

are drilled; the wheat used about York is both of the red and white sort.-Plants I observed betwixt Knaresborough and York: Plenty of Eupatorium cannabinum, Epilobium hirsutum, Scrophularia aquatica, Betonica officinalis, Bryonia nigra, Convolvulus sepium, C. arvensis, some of Jasione montana near Hammerton, where also I observed Nepeta Cataria. Betwixt Knaresborough and Green-Hammerton I gathered Campanula Trachelium, &c.-About four miles from York, the Cathedral appears not above a mile from you. Approach York about six P.M. The river Ouse runs gently by the town, and besides small craft, it bears up to the city some vessels in the merchant-way of two masts, but of no great burden. A canal sets off from the Ouse towards the north, and carries coals and other articles of trade up the country for a considerable extent. great line of canal is to form a junction betwixt the Humber and Liverpool.

Walk out in the evening to see the Cathedral, one of the greatest and finest in the world. Its length five hundred, twenty-four and a half feet; its breadth two hundred and twenty-two feet. The largest Quire I have yet seen. The great Window seventy-five feet high by thirty-two feet wide. The paintings of this and indeed of all the windows of this vast building are wonderfully grand. In the body of the Quire are the seats of the Judges in the times of Assize on the one hand, and on the other side are the seat of the Archbishop, and to the left of it the seat of the Lord Mayor, &c.

Go next into the Outer Vestry, where among other pieces of antiquity, you see the wooden chests, one thousand four hundred years old, where the priestly robes were kept. Here also you see a very ingenious wooden model of the Cathedral, made by a little boy of this city with his knife, &c.—Were next conducted into the Inner Vestry, and shewn

which year a Roxburghshire farmer (William Dawson) introduced the practice of sowing in drills, the result of experience gained by him in Leicestershire. The superiority of the new system being speedily recognised, a complete revolution was thus effected in Scottish turnip-culture, and, to judge from the above reference in the Diary, the farmers of Scotland had then wholly adopted the Leicestershire method, while the majority of their English brethren still lagged behind.

a great number of very old curiosities, and among the rest a large Bugle-horn, given in a donation to the Archbishop of York by Ulphus, one of the West Saxon kings. It was taken away in the wars betwixt the Houses of York and Lancaster, and restored afterwards to the Cathedral. Here is shewn also the cloak of James VI.; and also the silver pastoral staff presented to the Archbishop of York by Catharine of Spain, mother-in-law to Charles II.; &c.

In the next place were shewn to the Chancel, where there are several well-finished monuments of marble erected to the memory of illustrious persons. Among these is to be remarked the monument of Sir George Sackville, by Fisher of this city. The statue of Sir George is handsomely executed; the veins in the back of his hands, and the folds of his stockings, in short the drapery in general, is happily executed. In one place of the Chancel is to be seen a statue alone on its back of the son of Constantine the Great, &c. &c.

The Chapterhouse, where the Bishops are installed, is one of the most magnificent octagons in the world.—In short, after having seen St. Paul's, the Cathedral of York will not fail to strike the stranger with astonishment

Saunter down by the side of the river Ouse to the New Walk. Then take a view of the Castle with the round Tower, where the ordnance and ammunition, &c., were wont to be kept.—Return in the dusk to the inn, and sup with a Mr Mariott, a curious talkative gentleman of Manchester, a sedate, superior gentleman, a Mr Braddock of Macclesfield, and another gentleman whose name I did not hear mentioned.

Friday, 21st August. York. This city has little trade; because no man can set up in business here without purchasing the freedom of the city, which is an expensive matter, and to beginners in business altogether unattainable. Something, I am told, is done here or at least may be done in the whip-way. No vessels of any great consequence come up to the town. The city is surrounded with walls, and has double gates. The best point for viewing it is from the south-west as you come from Borrowbridge [Borough-bridge] to the bank of the river

Ouse. Here the river, the walls of the city, its spires and towers, together with the Cathedral rising magnificent over all, exhibits a very picturesque and striking scene.

Leave York at half-past seven A.M., and pass over a long-extended heath, taking different names in different places according to the adjoining towns to which it belongs. About the sixth mile from York, pick up some plants of the Gentiana centaurea ? Centaurium]. About the ninth mile from York, pass by on my right hand Housholm, an elegant Seat of Cholmondly, Esq.;* the ruins of Barboro' Castle on my left, belonging to the same. Arrive about eleven o'clock at Whitewell† Inn, under an heavy rain. Stop here and breakfast.-At one P.M. set out from Whitewell Inn, and come to the Gate leading to Castle-Howard (Seat of the Earl of Carlisle).

Pass through a series of gates and welldressed parks. Betwixt the third and fourth gate observe a grey-tailed squirrel crossing the road and climbing up the trees; it seemed to be a different species from those at Dunkeld. Betwixt the fourth and fifth gates, have an admirable view of the Castle and the park, with the woods, pyramids, temples and mausoleum. Come into the great avenue leading to Howard Inn, and enter at the fifth gate under a stone arch. On each side of the entrance a wall extends a great way to right and left, embrasured atop and terminated on each hand with a tower. Pass along the avenue in a straight line to Howard Inn, forming a fine object with a pyramid rising over the centre of the building, and covering the arch through which the highway passes. The trees on each side of this stately avenue are disposed in little plantations of about sixteen or twenty large trees in each clump, separated from one another by an empty space of about a hundred feet, through which empty space you have a delightful view of the Park and its environs. This disposition of the trees takes off from the tedious uniform dulness of a great avenue, where the trees are close and uninterrupted on each side of the traveller.

When you ascend to the gate-way at the

^{* &}quot;Housham. N. Cholmley, Esq." (Paterson's Itinerary.)
† "Whitwell." Twelve miles from York. (Ibid.)

Inn, through the arch you have a striking view of Marlborough Pillar,* placed at a distance in the centre of the avenue, which is continued in a straight line for about two miles beyond the inn. Put up at Howard Inn (Warwick's). Get a guide and go down to

CASTLE HOWARD.

This is altogether a princely place, and superior to any I have yet seen. A great part of the house is lately built, and the works are not yet finished. The style of the whole is simple but magnificent, and more extensive than I suppose most of the Palaces of Europe. The rooms are spacious and elegant, and the prospect of the park from each side of the Castle is fine beyond description.

Go in to the Gardens. Here is the first† pinery I ever saw, and upon the whole the best kept hot-houses. The vines most luxuriant; and here is what I never saw before, almond-trees, peaches, nectarines, etc., trained upon spars placed not as usual in a perpendicular but in a horizontal position,

* [Footnote by the diarist.] Inscription on the north-west side of Marlborough Pillar:

If to perfection these plantations rise;
If they agreeably my halls surprise;
This faithful pillar will their age declare,
As long as time these characters shall spare.
Here then with kind remembrance read his name,
Who for posterity perform'd the same.

Charles the Third Earl of Carlisle,
Of the family of the Howards,
Erected a Castle where the old Castle of Henderskelf
stood,

And called it Castle Howard.

He likewise made the plantations in this Park,
and all the out-works, •

Monuments, and other plantations belonging
to the said Seat.

He began this work In the year 1702, And set up this inscription In the year 1731.

Inscription on the south-east side of Marlborough Pillar:

Virtuti et fortunæ
Joannis Marlburiæ ducis,
Patriæ Europæq. defensoris,
Hoc saxum
Admirationi ac famæ sacrum,
Carolus Comes Carliol. posuit,
Anno Domini MDCCXIV.

† As in previous instances, "first" is probably used here with reference to degree, not time.

about two feet from the ground, and bearing abundance of rich fruit. Mr. Abel the gardener thinks this a good way.

From the Garden went next along the front of the Castle along the lawn by the statues to the Temple. This a most magnificent dome, finished entirely within with the most costly marble.

From the Temple proceed to the Mausoleum. The Mausoleum stands on a rising ground about a mile south from the Castle, and commands a fine view of the bridge, the three ponds, the lawn, the castle, the park, the plantations, and different peeps of the country to a great distance. This is the Burying-place of the Family, and perhaps one of the most magnificent things of the kind in the world. It covers an acre of ground. A spacious Dome rises in the centre, its roof supported by twenty pillars, each pillar about twelve feet round and not less than fifty high. The floor of the dome within is laid with the finest variegated marble: here the funeral service is performed. All round the base of the dome within are placed niches for depositing the coffins, which when deposited are shut up and inscribed with the name of the person that lies there.

In this solemn scene there is indeed capacious room, sufficient for holding

All the blood of all the Howards.

A few of the niches only are shut up.

The Earl of Carlisle has here upwards of four hundred acres of mowing ground about the Castle, and the largest quantities of hay I ever saw. The park extends about four miles each way. There are vast varieties of venerable trees, finely disposed. Some of the oaks here upwards of twenty feet in circumference.

Everything about this place is in a style

approaching to the sublime.

Leave Howard Inn after dinner and set out for Helmsley, fourteen miles to the northwest of Howard Castle. About a mile northeast of the Castle my Lord Carlisle is working excellent limestone with a coarse kind of coal brought up the Derwent. There is no burning coal in this country. For this coarse coal they pay just now at the landing-place at the rate of sixteen shillings the chaldron,

thirty-two bushels. In the Park observe the *Pinguicula Lusitanica*. Arrive at the highest point of the ground at the north-east end of the great avenue: here stop and look back upon Castle Howard and its Entrance. Bid adieu to this great prospect, and descend the hill. A Castle in ruins on my right; fine country before me. But the view clouded by an approaching storm.

Under a row of "reverend elms" observe the following plants: Origanum vulgare, Clinopodium vulgare, Marrubium vulgare, Campanula Trachelium, &c. A cloud pours down a deluge upon me. Pass through a plain country, and approach the high grounds. Ascending the hill observe plants of Verbas-

cum thapsoides, Reseda Luteola, &c.

Rain continues pouring without mercy; the roads run in streams. Night comes upon me in thick darkness as I approach Helmsley. Fall in with a man driving coals to Helmsley. He informs me there are no coals in this neighbourhood, save what they bring all the way from Malton, eighteen miles off, at the rate of eighteen shillings the chaldron.

Put up at Wilson's. A good comfortable fire in the kitchen; take this as the best room in the house. Get tolerably dry before supper. A gentleman from Ferrybridge, a friend of Sir John Ramsden, joins my company, with whom converse till eleven o'clock. Then go

to bed.

Saturday, 22nd August. Helmsley. Rise at seven A.M., and go up to see the Old Castle. It has been a stately pile, surrounded by a double moat, and strongly barricaded with gates. The walls are in some places nine feet thick: vast masses of them are tumbling down into the moats. It was demolished, like many other respectable Castles, by the rude hand of Oliver Cromwell.

From the Old Castle direct my morning walk to Duncombe Hall, a beautiful Seat of Charles Brinsly Duncombe, Esq.* It stands about half a mile above the village of Helmsley. Its principal front is towards the west, where it looks into a large deer-park finely stocked with deer, and surrounded with thick woods. From the deer-park the spectator has a charming view of the country and the adjacent moors far and wide. On the east

front of the house, within the pleasure ground, is the bowling green, from which to the right and the left is extended, in a semicircular form, one of the finest green walks that can possibly be conceived. It stretches along a high bank and has a fine terrace running parallel with it and sloping down all the way to the skirts of the wood that adorns the face of the bank. In the den below runs a pretty romantic stream with dashes of water and cascades, making a rushing noise upon the air, heard solemn through the dark and silent grove. This green walk is terminated on either hand with a neat temple which, like the mansion-house and the offices, are all of the simple Doric order of architecture. The garden lies low and warm, at a considerable distance to the north of the house, near the village of Helmsley. Here are nice greenand hot-houses, kept in excellent order. The paintings in Duncombe Hall are by some connoisseurs preferred to those at Castle Howard. But Duncombe is a miser, and unlike his brother the member of Parliament for the country [county]. This estate was purchased by one of the present proprietor's ancestors, who was connected with James VII., and retained the King's money in his hands after the Abdication.

After breakfast leave Helmsley, and take the hilly country for sixteen miles up the narrow valley of Billsdale, all the property of Squire Duncombe. He has a vast extent of moors in this neighbourhood, extending forty or fifty miles, abounding with the common grouse. I am informed the black grouse are found, though not in plenty, upon the property of Sir W. Fowlis, of Ingleby Manor, in this

neighbourhood.

About sixteen miles north of Helmsley leave the hilly country and come down upon the plain. Arrive about four P.M. at Stocksley, twenty miles north of Helmsley, after having been drenched to the skin by heavy rains. Much of the corn is laid flat by the rains of this day and last night.—In this long, high stage of steep and rough road (the most difficult I have yet passed over in England), there is no resting-place, save a little alehouse or two near the head of Billsdale, where I stopped to give Cally a mouthful of hay, for they had no corn, and myself a mouthful of ale.

^{* &}quot;Duncomb Park, T. Duncomb, Esq." (Paterson's Itinerary, 1785.)

In this tract I observed plenty of Empetrum nigrum, Betonica officinalis, Epilobium angustifolium, Solidago virga-aurea, &c. On coming down from the hilly region (Sir W. Fowlis's on my right), you leave on your left hand a tract of mountain, somewhat resembling the Lomond Hills of Fife, but not so high, stretching from east to west about four miles south of Stocksley* [Stokesley]. At the top of the hill, where you first come in view of the plain, the prospect is very agreeable; the country before you for thirty or forty miles appears all plain as a bowling-green, and decorated as a garden. On coming down into the plain, I observed by the wayside a good deal of Gentiana centaurea, growing with the Ononis spinosa, &c.

On arriving at Stocksley, a considerable village here, find it the weekly market. A good number of country people and farmers in the town; but little grain is sold here. They sold some here to-day at nine shillings a bushel; so that it seems it has not yet fallen here as in the South. The hay everywhere much damaged by the rains; a great deal of it still in the fields. No corn cut down in this part of the country. They do not expect harvest here for three weeks to come. Upon the whole this season seems to be, at a medium, three weeks later than last, and this over all England. Leave Stocksley at half-past five P.M., and set out for Stockton.

About four or five miles north of Stocksley, on the way to Stockton, the ground rises gradually to a considerable elevation. Here the rain ceasing and the clouds dispersing, I enjoy one of the most pleasing prospects the Island can boast of. A romantic range of mountains, which I had now left about seven miles beyond [? behind] me, stretches west several miles and terminates abruptly in the To the east, on my right hand, another and a smaller range, but with one remarkable mountain (Roseberry Topping) of a pyramidal form towering "proudly eminent" above the rest, extends north about eight or ten miles and then slopes downward towards the coast. On the west, a broad expanse of

plain country embellished with every ornament that the hand of art can bestow upon it, and this vast plain fringed by the summits of high mountains seen at the distance of fifty and sixty miles. On the north and north-west the county of Durham rising by a gentle ascent from the banks of the river Tees, seemingly for twenty or thirty miles, and also decorated in the highest manner, and terminated by the tops of mountains. In the bottom of the rich flat country before me, the Tees itself (town of Stockton on the north bank of the river) winding in sweet meanders through the vale, widening towards the north-east into a capacious Bay, and losing itself in the German Ocean; with the distant coast towards Hartlepool, and a number of sails descried at different distances from the shores to the very verge of the horizon. The setting sun darting from his broadened orb his inclined [or "unclouded"] rays over the whole. On such a scene as this the mind of the contemplative traveller delights to dwell. A mild, sweet, and tranquil evening brings me to Stockton.

Before you enter the town, you pass the Tees by an elegant bridge of five arches, where the river is seen winding delightfully along and forming islands in its course. On these islands and on the plains on each side of the river, groups of flocks and herds are seen amusing themselves in sportive maze.

Now is the time
For those whom Reason and whom Nature charm
To steal themselves from the degen'rate crowd;
To tread low-thoughted pride beneath their feet;
And woo lone Quiet in her silent walks.

(To be continued.)



The Significance of Holes in Archwology.

By A. W. BUCKLAND, F.A.I.

EN now, at the close of this nineteenth century, people, and those not by any means the most ignorant, continue to hoard *lucky*

money—that is, coins in which a hole has been bored by unknown hands. To find or to receive such a coin means good luck far

^{*} The Cleveland Hills would seem to be here indicated, with the peaks of Botton Head and Loose Howe, to represent the West and East Lomonds in Fig.

beyond its intrinsic value, for the luck is not so much in the money as in the hole.

In this article I propose to show that this present-day harmless, but apparently unmeaning, superstition, has its root in necromancy or ancestor worship, and can be traced back in various forms, but always in connection with "medicine"*—that is, witchcraft—to the very earliest ages—pro-

bably even to paleolithic times.

In various parts of Great Britain we find an analogue of lucky money in various stones known as lucky-stones, mare-stones, or hagstones, which are very highly valued. Most of these are small pebbles, with natural holes, indentations, or cups in them; they are used for driving away hags or witches, especially the nightmare, which is supposed to be caused by a witch sitting upon the stomach of the sufferer. An abstract from an old book of Oueen Elizabeth's time is given in Notes and Queries,† containing "a fonde foolishe" charm for driving away the nightmare. "Take a Flynt Stone that hath a hole of hys owne kinde and hang it over hvm."

Three of these were exhibited by the Earl of Ducie at a meeting of the Anthropological Institute in 1887, one being remarkable from having two human teeth fixed in the natural hole of the stone; the teeth were probably used to increase the luck of the stone. This marestone had been in one house seventy years; and similar stones seem to be in common use among the peasants and fisher-folk of the North of Scotland, being kept in the bed to ward off nightmare, hung in byres behind cows to ensure safety in calving, or hung on stable-doors to prevent the horses from being hag-ridden. The latter use is, I believe, still common in many parts of England, for I have frequently seen in Wiltshire, stones, and sometimes a piece of cork with a hole in it, tied to the keys of the stable. Several of these holed stones used as amulets are described in the catalogue of the National Museum of the Society of Antiquaries of Scotland. Among these amulets we find

four amber beads, formerly used in Argyll-shire as charms for the cure of blindness, and four spindle whorls called adder-stones, used as charms against diseases of cattle; also a flat oblong stone less than a quarter of an inch thick, notched at the edges and pierced with two holes, formerly used as a charm for the cure of diseases in Islay, and two perforated pieces of sand-stone found in cow-byres used as a protection for the cattle against witchcraft. In the foreign portion of the same collection is also to be seen a vertebra of a gazelle used in Palestine as a charm against evil spirits.

I cite these instances to show that both natural and artificial holes were considered



FIG. I .- TYPICAL LUCKY-STONE.

of the same value for the cure of disease and averting witchcraft, and that the same idea may be traced to Palestine.

Similar instances might probably be found in almost any museum. A typical specimen here reproduced (Fig. 1) is given by General Pitt-Rivers as found by him in his excavations at Rotherly, commenting upon which he says: "I have frequently seen holed stones of this nature hung up over doors of houses or upon trees, to keep off fairies or for luck, by the peasants of this neighbourhood at the present time."*

* Excavations in Cranborne Chase, vol. ii., p. 179. General Pitt-Rivers, F.R.S.

^{*} Throughout this article the term "medicine" is used in the Shamanistic sense, being equivalent to witcheraft, as employed in healing ceremonies by "witch-doctors."

⁺ Vol. i., p. 54, Series VI.

Similar pebbles have been described by Mr. Leland in an article in the Asiatic Quarterly (February, 1893). He treats chiefly of the Salagramma, the sacred pebble of India, which, held in the hand of the dying Hindoo, is a sure preservative from the pains

of eternal punishment.

This pebble is described as a kind of ammonite, which, according to tradition, was bored through by Shiva in the form of a worm in the endeavour to destroy Vishnu the Preserver, who had been turned into this stone by Maia (illusion or glamour). Vishnu escaped, and ordered that in future such stones should be worshipped. A luckystone, under an almost identical name, the Salagrana, is carried about in Tuscany in a red woollen bag with a bit of gold and silver and some of the herb concordia, and must be kept secret. This is described as a piece of stalagmite, resembling an earthworm's mould.

A tradition similar to that of Shiva is recorded of Odin, who is said to have turned himself into a worm, and bored a hole through a rock. Hence all holed stones are called Odin's stones in Scandinavia, in England holy stones, being in both countries used as amulets against witchcraft. Among these stones must be classed the famous serpent's egg of the Druids, described by Pliny as a cartilaginous incrustation full of little cavities such as are in the legs of the

polypus.

Sir John Evans has recorded many instances in which stones full of little cavities have been found in graves, evidently placed there from a superstitious belief in their preservative power against evil spirits, and there seems reason to believe that beads found in graves are also in some cases associated with the belief in the efficacy of holes in keeping the deceased from the machinations of enemies. The Red Indian medicine-men, especially among the Cherokees, use beads to symbolize persons, and their shamans take beads and with them work spells for the benefit of their employer, and for the destruction of his enemies. Red is the lucky colour, and black the emblem of death. By some extraordinary manipulation these beac's are made to move up and down the outstretched fingers of the shaman, and by their VOL. XXXII.

movements the success or failure of the spell is foretold. A certain formula or prayer is used to invoke success upon the client, the red bead being held between the finger and thumb of the right hand, whilst a black bead, typifying the victim, is held in the left. Curses are called down upon the latter, and then the shaman, stooping down, makes a hole in the ground with his finger, "drops into it the fatal black bead, and buries it out of sight with a stamp of the foot."* Purification by water is also associated with this ceremony, the shaman addressing a prayer to the stream near which the incantation takes place, whilst the client pours the water over his head, or dips in the stream seven times.

In gathering medicinal plants also, the Cherokee medicine-man drops a red or white bead into the hole made in pulling up the root, in order, Mr. Mooney thinks, to compensate the earth for the plant torn from her bosom. In the Navajo myth of the creation of the sun, beads play an important part. Two women, known as the Turquoise woman and the White Shell woman, take white and blue beads, draw a circle round them with a crystal dipped in corn pollen, mark them with eyes and mouth, and produce a slight light from the white shell bead and a greater light from the turquoise. These are afterwards multiplied by twelve at each of the cardinal points, and with the crystal a circle is drawn round the whole, and the crystal being held over the turquoise face, it lights up and becomes the sun.

Here we get the magic circle which always plays such an important part in witchcraft, a survival of which seems still to cling to that symbolic circlet, the wedding-ring, which, as we know, is used to cure a sty on the eyelid and other ailments, and to promote dreams.† Curative properties are not confined to the wedding-ring, for prior to the Reformation, cramp-rings were solemnly blessed by kings of England, and distributed

* See Sacred Formulas of the Cherokees. Smith-

sonian Report, 1885. Mooney, pp. 393, 394.

† The healing power of the wedding-ring was communicated to the finger upon which it was worn, which was supposed to cure any sore or wound stroked by it, all the other fingers being injurious, and the physicians of Greece and Rome used it to stir their medicines. See Chambers's Book of Days, February 3.

for the benefit of those afflicted with cramp or rheumatism; and silver rings are still worn for the same purpose, whilst earrings are commonly supposed to be a specific for weak eyes.

To the magic circle we shall revert later, and it must be observed that rings are simply



FIG. 2 .- TOLMEN OR PUGGIE STONE, DARTMOOR.

circles or holes, and the curative properties assigned to them belong to the form chiefly, but partly also to the material employed, and to their consecration by a priest or a king.

The remedial and protective powers attributed to these smaller holes are found also in connection with those larger holes, whether natural or artificial, found in stones very widely scattered over the world. Some of these form, or have formed, the entrance to tombs or dolmens; some are standing stones or monoliths, and some are natural waterworn rocks (Fig. 2).

We give here illustrations of three wellknown British examples. Fig. 3 is the



FIG. 3.-MEN-AN-TOL, OR CRICKSTONE.

Cornish Men-an-tol, known locally as the Crickstone, through which people still creep for the cure of rheumatism. There are thirteen holed stones known in Cornwall. the one illustrated being the largest, but all are supposed to cure various ailments, especially rheumatism, hence the name Crickstone is applied to all. The Men-an-tol is artificially bored, and there can be little doubt that it originally formed the entrance to a tomb, for similar stones are found in that position in many distant countries, as well as in various parts of Great Britain, notably in Gloucestershire, Wales, and the Isle of Man, but of these I have written elsewhere,* and shall therefore treat only of holes in stones not recognised as certainly sepulchral, although in some cases they undoubtedly are so.

Fig. 2, also known as the Tolmen or Puggie Stone, is of a gigantic water-worn rock resting in the bed of the Teign on Dartmoor,† to which the legend attaches that it was used in rites of purification by the Druids, who passed their neophytes through it. Stones thus employed for purification or regeneration are reported in

Fig. 4 is an illustration of a stone in Gloucestershire, near Minchinhampton, known



FIG. 4.-WOFUL DANE, OR LONG STONE.

locally as Woful Dane, but called by Thurnam the Long Stone, and described by him as "doubtless the remains of one of the chambered long barrows common in this part of Gloucestershire. Near the bottom of the stone is a natural perforation, through which not many years ago children brought from a considerable distance used to be passed for the cure and prevention of disease." A lady, still young, residing in the neighbourhood informed me that her nurse could hardly be restrained from pass-

* The monument known as King Orry's grave, etc. Journal Anthropological Institute, May, 1889.
† Mr. Walhouse, in a paper contributed to the Journal of the Anthropological Institute (August, 1877), on "Non-Sepulchral Rude Stone Monuments," points out that a similar stone is found on the top of Kestor, on "Non-Sepulchral Rude Stone Monuments, which would seem to have been connected by lines of stones with the Tolmen in the Teign.

ing her, when an infant, through this stone to cure the measles, and it may doubtless be thus used even now.

I have taken these three stones as typical, because the legends connecting them with the cure and prevention of disease are still in force, but there are scores, perhaps hundreds, of holed stones found widely scattered from India through Syria, Circassia, Cyprus, North Africa, Brittany, and many other countries, to our own shores, to which in all probability similar legends have

at some time been attached.*

Curious instances of the healing properties still attributed to sacred stones in America are given by Mr. Bourke in his very interesting article, entitled "The Medicine-men of the Apache" in the Smithsonian Report of the Bureau of Ethnology (1888). He says that medicine-men seem to be subject "to a gradual decadence of their abilities, which can only be rejuvenated by rubbing the back against a sacred stone projecting from the ground in the country of the Walapai on the Atlantic and Pacific railroad." Another stone of the same kind was formerly used for the same purpose by the medicine-men of the Pueblos of Laguna and Acoma, and he adds, "I am unable to say whether or not such recuperative properties were ever ascribed to the medicine-stone at the Sioux agency near Standing Rock, South Dak; or to the great stone around which the medicine-men of Tusayan marched in solemn procession in their snake-dance; but I can say that in the face of the latter, each time that I saw it (at different dates between 1874 and 1881) there was a niche which was filled with votive offerings."

This brings us to the subject of cup-markings, incomplete holes, some of which are undoubtedly connected with "medicine," especially those which resemble plain cups, and which are used, as in the case above, to receive offerings. Of those called elfstenar, in Sweden, Miss Mestorf says: † "The elfs are

the souls of the dead; they frequently dwell in or below stones, and stand in various relations to the living. If their quiet is disturbed, or their dwelling-place desecrated, or if due respect is not paid to them, they will revenge themselves by afflicting the perpetrators with diseases or other misfortunes. For this reason people take care to secure the favour of the 'little ones' by sacrifices. Their claims are very modest—a little butter or grease, a copper coin, a flower or a ribbon will satisfy them. If they have inflicted disease, some object worn by the sick person, such as a pin or a button, will reconcile them."

Mr. Rau, in the article from which I have quoted,* points out that these cup-markings are common in churches, and that in Germany they are supposed to possess healing properties. "Fever-sick people blew, as it were, the disease into the cavities. Professor Desor learned that in the church of Voanas, near Bourg, a large stone, called 'La Pierre de Saint Loup,' is preserved, into which the sick and impotent grind holes, and drink the pulverized matter, which, as they believe, cures the fever and renews the vital strength.' Stones similarly used are described in many other places, and it is probable that the anointed stones of the Jews were of this nature, as also those cups found by Mr. Bent on the altar-stones in front of the tall monoliths at Axum.

Lenormant points out that diseases were looked upon as persons among the Finns, as also among the Accads; with the latter they were children of Nin-ki-gal, the goddess of the terrible abyss, the abode of the dead.†

The dwelling-place of the Finnish diseases, daughters of the old woman of Poliga, was the hill of grief, recalling the mountain of the West of the books of Accad, from which the principal demons went forth over the surface of the earth. This hill is high, and on its summit lies a vast smooth stone surrounded by other large stones. In the central one are bored nine holes, into which diseases are cast by conjuration.‡

Old World and in America." Smithsonian Contributions to Ethnology, vol. v., p. 86 et seq.
* See above in Smithsonian Contributions, vol. v.

^{*} There is a holed stone at Kilmalkedar, County Kerry, of which Mr. Wakeman writes that thirty years ago its repute was equal to that of Stennis, for it was believed by many of the old inhabitants of Kerry that persons afflicted with chronic rheumatism, falling sickness, or other ills, might, by passing three times round it, be restored to health.

[†] Charles Rau on "Cup-shaped Sculptures in the

Article by Charles Rau on "Lapidarian Sculptures."

† La Magie chez les Chaldéens et les Accadiens, p. 232.

‡ It is noteworthy that the number nine, as con-

It may be noted as a singular coincidence that the large cupped stone here illustrated, from Ohio, has likewise nine holes (Fig. 5).



FIG. 5 .- CUPPED STONE, OHIO.

The number of cups is not, however, invariable; they sometimes occur in large numbers, and sometimes three only are found, and often so placed as to forbid the idea that they were used for any purpose except as

some religious symbol.

But holes used as "medicine" are not confined to stones. Among the people of Siberia we are told of small human figures used as remedies for various diseases; one with a hole in the breast is carried about as a cure for hæmorrhage; another, bored through the lower part of the body, to stop diarrhœa.* A wooden figure, apparently of this kind, is given in a paper upon "The Point Barrow Eskimo," in the Smithsonian Report of the Bureau of Ethnology, 1887. This figure is labelled "Socket for blubber-holder," but Mr. Murdoch, the author of the paper, says, "No such escutcheons, however, were seen in use in the houses visited. The article is evidently old. It is a flat piece of thick plank of some soft wood, 11'4 inches long. 4'2 inches broad, and about 11/2 inches thick, very

rudely carved into a human head and body without arms, with a large round hole about 14 inches in diameter through the middle of the breast. The eyes and mouth are incised, and the nose was in relief, but was long ago split off. There is a deep furrow all round the head, perhaps for fastening on a hood (Fig. 6).

A similar figure (Fig. 7), also in wood, very rude and ancient, was found many years ago under a vast mass of guano, in the Chincha Islands, Peru,* and it may be suspected that many of the figures with holes in them otherwise than for suspension, to be met with in museums, are in some way connected with "medicine," that is, witchcraft. Engraved shells, with many apparently useless holes, have been found in mounds in many parts of the United States. Some of these, representing contorted and almost unrecognisable human figures, birds, snakes, and spiders (Fig. 8),



FIG. 6. -ESKIMO FIGURE.

were almost certainly amulets. It is somewhat remarkable that an engraved shell, also bored with an apparently useless hole, has

* Anthropological Journal, April, 1875.

nected with ancestor worship and the cure of disease by shamanistic rites, is found in Russian Siberia and among the American Indians, as well as apparently among the ancient Chaldeans. The shaman among the Yakuts, in his healing incantations, addresses his song, among others, to "Spirits of the sun, mothers of the sun dwelling in the south, in the nine woody knolls," and a father shaman with nine sons is chosen for the purificatory ceremonies, whilst among the Navajos a nine days' ceremony is appointed for invoking the gods of healing.

* Archaelogical Journal, vol. ii., p. 228.



FIG. 7 .- FROM CHINCHA ISLANDS, PERU.

been found at Telloh, and is figured by Mr. St. Chad Boscawen in *Harper's Magazine* (January, 1894), as a relic of ancient Chaldea



FIG. 8.—ENGRAVED SHELL, OHIO.

(Fig. 9). This, with other engraved shells, is brought forward by Mr. Boscawen as a proof of the very early commerce between ancient Chaldea and Egypt vià the Persian Gulf and the Red Sea, entailing the circumnavigation of the Arabian peninsula, and suggesting the



FIG. 9. -ENGRAVED SHELL, TELLOH, CHALDEA.

probability of an intercourse with India, which would of course account for much interchange of ideas, and for the spread of superstitions; for of all the nations of antiquity the Chaldeans were the most given to witchcraft.

(To be continued.)



Traces of Christianity in Britain during the Roman Decupation.

JOHN JAMES RAVEN, D.D., F.S.A.



HE records of the rise and progress of Christianity in England are losing none of their importance under the light of the discoveries

and controversies of the present day. Without attempting to rival any of the useful and readable handbooks which have been put forth, it is my endeavour to set out a few of those evidences which we possess. They may be divided into two classes—docu-

mentary and material.

The former have been marshalled with the strictest care by the lamented Arthur West Haddan. Any addition to his matter, or divergence from his views, is made only with hesitation. For the latter our field is wider, and will be sure to expand its bounds further as the labours of the archæologist from time to time exhume fragments of inscriptions, or even of pottery, coins, and other like objects. These will sometimes unexpectedly illustrate the advance of the Gospel in our land while yet the tramp of the Roman legions thundered along the roads which themselves had made, and the Saxons were still a nation of pirates, requiring a special officer to ward off their attacks along a line of coast from Brancaster to mid-Sussex.

Mr. Haddan sums up the evidence as to British Christianity in the first century in the words that the statements respecting British Christians in Rome or Britain, or apostolic men preaching in Britain, "rest upon either

guess, mistake, or fable."

Whoever regards the distinctly heathen character of the two epigrams of Martial which refer to Pudens and Claudia, by help of which it is sought to connect them with the Christians mentioned in 2 Timothy iv. 21, will be disposed to agree with Bishop Stillingfleet and others who make light of the story. The case of Pomponia Græcina rests on the double assumption that she was a Christian and a Briton. Bran, the alleged Christian father of Caractacus, is separated from his earliest witness by a thousand years; the epistle of Pope Innocent I. (402-417) specifies neither St. Peter nor Britain, leaving that Apostle's claims to be substantiated by an authority circa 900. Lateness of testimony alike affect SS. Simon Zelotes, Philip the Apostle, James the Elder, John, Aristobulus and Joseph of Arimathæa.

But I must confess my reluctance to class with these the words of St. Clement of Rome (adv. Cor. i. 5): Κήρυξ γενόμενος εν τε τ $\hat{\eta}$ ἀνατολ $\hat{\eta}$ καὶ εν τ $\hat{\eta}$ δύσει . . . δικαιοσυνην διδάξας ὅλον τὸν κόσμον, καὶ ἐπὶ τὸ τέρμα τ $\hat{\eta}$ ς δύσεως ἐλθών. Of the "limit of the west"

* Origines Britannica, p. 45.

we have various interpretations, Fell and Ruchat contenting themselves with Italy; Pearson, Neander, and Olshausen preferring Spain; others timidly looking further; Usher and Stillingfleet standing up for Britain. I dare not make my choice amongst these great names, but rather fasten on the expression, "the whole world." Now, if this epistle was written in Domitian's persecution (A.D. 95, which date has so much to recommend it), Agricola's rule in Britain, his defeat of Galgacus in Scotland, and the condition of things at his departure were a good fifteen years old. That condition of things reveals large wheat-growing districts and other developments of the resources of the country, which would seem certainly not behind the table-land of Asia Minor; and as there is no impossibility that the journey to Spain (Rom. xv. 24, 28) may have been carried out, that it may have been prolonged to Gaul and to Britain, I would plead for this Pauline visit being left in the category of the unsolved, rather than decided in the negative. St. Clement must not be pressed into excluding from "the whole world" a country so circumstanced as Britain.

When we come to the second century, the same difficulty confronts us in a passage in Justin Martyr against Trypho. He is commenting on the eleventh verse of the first chapter of Malachi, convicting Trypho that his interpretation that the verse is fulfilled in the prayers of the διασπορά is a piece of selfdeception, for that the Jewish race was not to be found from the rising of the sun unto the setting of the same, proceeding: οὐδὲ ἐν γὰρ ολως έστι το γένος ανθρώπων, είτε βαρβάρων είτε Έλλήνων, είτε άπλως φτινιούν ονόματι προσαγορευομένων, η άμαξοβίων, η αοίκων καλουμένων, ή έν σκηναις κτηνοτρόφων οἰκόυντων · έν οίς μὴ διὰ τοῦ ὀνόματος τοῦ σταυρωθέντος Ίησοῦ εὐχαὶ καὶ εὐχαριστίαι τῷ πατρὶ καὶ ποιητή των όλων γίνωνται. The date of the dialogue ranges from A.D. 155 to 164, by which time the condition of Britain must have further improved; and it seems rather a high-handed course to impute that to mere vague rhetoric, against which no probability appears to exist. Certain it is that in another fifty years we get the plain testimony of Tertullian (adv. Jud. vii.), circa 208, asking on whom all nations had believed except

on Christ. He names Parthians and the others rehearsed in Acts ii. 9, 10: Gætulians, Moors, Spaniards, divers nations of the Gauls, and places of the Britons inaccessible to the Romans, but subdued to Christ ("Britannorum inaccessa Romanis loca, Christo vero subdita"), which passage, when considered with reference to the year in which it was written, assumes not only a national, but even a local importance.

Britain had nine years before received a severe blow in the defeat of Clodius Albinus, a man alike respected by Britons and legionaries, and now a wild outburst took place. The wilv Severus dismissed without definite reply the ambassadors of the Britons, who had taken alarm at what had been done, determining upon vigorous measures with these rebels. Herodian specifies the marshy districts as especially the objects of Severus's anxiety, names the use of bridges by the Emperor, and describes the barbarians in very full terms. So much of this is to be found also in Dion Cassius, who had unusual opportunities of obtaining information, that we are driven to include these districts in Tertullian's "Loca Romanis inaccessa Christo vero subdita." Comparing the barbarism depicted with what we know from other sources, it seems that there was a great variation in the civilization of the lighter soils and that of the mountains and marshes, and Tertullian's testimony to the spread of the Gospel in the latter would apply a fortiori to the former.

About thirty years after this we have two British allusions in Jerome's Latin version of Origen's Homilies, in the latter of which the words "his . . . qui ab orbe nostro in Britannia dividuntur" are a manifest citation of the well-known passage in Virgil's Eclogues. Following on these, we find one or two general allusions to Britain in Sozomen, three in Eusebius, and one in Hilary or Poictiers, the latter on the psalm "Domine quis habitabit," apparently referring to the building of material temples: "Deinceps Apostoli plurima tabernacula condiderunt, et per omnes orbis terrarum partes, quæcumque adiri possunt, quinetiam in Oceani insulis, habitationes Deo plurimas paraverunt." The latest date for these words is given as A.D. 367.

This brings us to the last of the great

persecutions, that under Diocletian, and the triple martyrdom of St. Alban at Verulam, and Aaron and Julius at Caerleon-on-Usk. The accounts, such as they are, are not very concordant as to time, and all that can be relied upon is that in the year 429 the tomb of the blessed Alban, martyr, was a well-known object in Verulamium, for Germanus, after the overthrow of the Pelagian "perversity," is related to have ordered it to be opened, that relics of all the Apostles and divers martyrs might be placed in it.

This seems to me the construction to be placed on the words of Constantius, the biographer of Germanus, writing a little more than forty years after the Pelagian upset. It seems impossible that, in the space of about 125 years, a mere story, professing to be accompanied by so tangible an object as a sepulchre, could have been fabricated. Supposing the martyrdom to have taken place in the year 304; a child, aged six, living in Verulamium at the time would never have forgotten it, would talk about it as an old man, say in the year 370. A boy ten years old listening to him would have been nearly seventy at the time of Germanus's opening the tomb, and thus we have as satisfactory a catena as circumstances admit of. I do not speak here of Bede's detail, but of bare fact, as thus recorded, and strengthened by the words of Venantius Fortunatus and Gildas; from the latter we have the names of Aaron and Julius, and, considering the rare adoption of Jewish names by Gentiles, the probability is that Aaron was a Hebrew of the Hebrews, perhaps of the tribe of Levi, who counted as loss for Christ the gain of his Jewish descent, and his Caerleon πολίτευμα.

The presence of three British bishops, one priest and one deacon at the Council of Arles, A.D. 314, when the manner of assembling that council is taken into consideration, and the proportion of delegates to the whole body in parts better known than Britain, is suggestive of great progress and increasing stability during the third century.

The Emperor Constantine, whose coins sometimes bear ARL. P. on the exergue, is related to have seen in a vision the Cross, with "in hoc signo victor eris," in the year 311. In the following year he finally defeated Maxentius at the Milvian Bridge, and two years after this, having concluded a peace

with his rival Licinius, he summoned a council at Arles. One of the forms of summons is extant, that to Chrestus, Bishop of Syracuse, who is required to come out of that province (Sicily), and bring two priests with him.* Though at the division of the Roman Empire into east and west there were five provinces in Britain, at this time there appears to have been no formal division. The frequent residence of Constantine at York may account for the primacy of that city, which with London are in "provincia Britannia," the third place having no name of province attached to it. The record runs thus: "Eborius Episcopus de civitate Eboracensi provincia Britannia Restitutus Episcopus de civitate Londinensi provincia suprascripta Adelfius de civitate Colonia Legionis II." (to adopt Bishop Stillingfleet's reading,† which is approved by Jeremy Collier‡ and by Haddans) "Exinde Sacerdos pres-byter; Arminius diaconus." The names, as usual, are important, Eborius being a form of Ywor, known in later times in Cambrian and Erse annals, and Restitutus very possibly, like Renatus, with mystic and spiritual meaning. But I have found the name somewhere in ordinary Roman inscriptions. Adelfius, from Caerleon-on-Usk, has a pleasant Johannine ring about it. The priest Sacerdos looks like a professional name, but the deacon Arminius must not be passed by. Here we have among the Celts a genuine Teutonic name, Armine or Hermann, suggestive that the Belgic race in the south and south-east of Britain, differing in tongue and religion from the Gauls, as Julius Cæsar testifies, had contributed its quotum towards the army of Christians in Britain.

Among the subjects of the twenty-two canons to which Eborius, Restitutus and Adelfius, with Sacerdos and Arminius, gave their assent were the observance of Easter, which was left to the direction of the Bishop of Rome; the ex-communication of those who abandoned the calling of a soldier; the prohibition of ordination by a single bishop, the number ordaining to be at least four; and the settlement of presbyters and deacons in the places to which they had been ordained. Nor can we fail to note the remarkable words in which communication is made to

the Bishop of Rome, St. Sylvester. He is addressed with all affection, but with no subserviency. The decrees of the Council of Arles are not submitted to him for his assent. but communicated to him in the full assurance that they would meet with his consent: "Ouæ decrevimus communi Concilio, Charitati tuæ significamus, ut omnes sciant quod in futurum observare debeant." Though fresh to the See of Rome, which he occupied for nearly twenty-two years, he was weak in health, and unable to travel to Arles in 314 and to the great Nicene Council in 325. Much as his presence would have been valued, his absence proved no obstacle to the conclusive power either of the Synod or Council in Southern Gaul, or to the Œcumenical Council at Nicæa.

There is no evidence one way or the other about the presence of British bishops at the Council of Nicæa. Constantine's own close connection with Britain, the possibility of his mother Helen being a Briton, his respectful letters desiring the presence of Bishops from all parts, and his offer to pay expenses, are but presumptions, to which may be added the comparative ease of the route. Well-established itinerary roads would take the travellers from Gessoriacum (Boulogne) to Milan, whence by the road surveyed A.D. 333 the course would be by Aquileia, Sirmium, Serdica, Constantinople, and Chalcedon. The arrangements for changing horses (mutationes) and stopping (mansiones) are complete for the whole distance.

But, present or absent, we have the explicit testimony of Athanasius and Eusebius to the assent of the British bishops to Nicene decrees about Arius and Easter, and to the acquittal of the former saint at Serdica.

The measured distances are:

			Miles.
Gessoriacum to Rheims			173
Rheims to Vienne -	-		330
Vienne to Milan -		-	409
Milan to Aquileia -	-	-	251
Aquileia to Sirmium -	-	-	312
Sirmium to Serdica (Mitrov	ricz)	-	314
Serdica to Constantinople	-	-	413
Constantinople to Nicæa	-	-	102
•			
Total	-	•	2,304

[&]quot;Transis Pontum, venis Calcedoniam, ambulus Provintiam Bithiniam." —Iter Hieros.

^{*} Euseb., x. 3. † Origines Britannica, p. 79. ‡ Eccl. Hist., i. 25. § Councils, etc., i. 7, note.

At 200 miles a week this would take more than eleven weeks, and the journey from London to Nicæa and back would leave little or nothing out of half a year, if it did not require a longer time.

The grammatical peculiarities of such inscriptions as remain have assigned them, in the opinion of most antiquaries, to the post-Roman period, so that we consider them today either by prolepsis, or as the children of those of an earlier date, either destroyed or as yet undiscovered.

Speaking briefly of these more tangible memorials, I will first refer to the incised slabs, chiefly in Wales, of which some have been known for three centuries past, while others have been of later discovery, and the list is still probably far from complete. Of 106 inscriptions recorded in Professor Rhys's Celtic Philology, there are twenty-four which may possibly be Christian. The claim of half of these rests on the presence of a cross, which, as Mr. Roach Smith has shown, is far from conclusive, nor, indeed, is the Chi Rho monogram a proof of anything like the faith which was once delivered to the saints. In the flood of Mithraism, Serapism, and other Oriental and Egyptian superstitions which had taken the place of the ancient, rugged, fierce, but less morbid, Roman worship, the Sacred Name of the Saviour of mankind was often used as a mere charm, salient instances whereof may be found on a gambling-board and on the collar of a runaway slave.

One of these inscriptions is the BODVOCI stone, on a mountain near Margam:

+ BODVOCI HIC JACIT FILIVS CATOTIGIRNI PRONEPVS ETERNALI VEDOMAVI.

As in other cases, we must not be alarmed at the inflexions. By the analogy of other epigraphs, we find BODVOCI to be the nominative case, and the interest of the inscription lies in PRONEPVS ETERNALI. The first word is rare, but used by Sidonius Apollinaris, who died in 482, though I know not whether in any sense different to the legal greatgrandson. "Eternalis" appears in a pagan expression Eternalis appears in a pagan expression Eternalis Tertullian (adv. Jud. 6), "Lex temporalis et æternalis." No great reliance can be placed on it.

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The best instance is from Llech Idris:

HIC INTVMVLO JACIT HOMO XPIANVS FVIT.

Here there is no cross visible, though the deceased is claimed as one of the little flock to whom it is the Father's good pleasure to give the kingdom.

The PAVLINVS stone at Dolau Cothi, according to Mr. Haddan, belongs to a later period. It is remarkable as evincing a knowledge of Virgil.

Another at Hayle, of which the presumable reading is, In Pa ce MVL ie Requievit N CVNAIDE HIC in TVMVLO IACIT VIXIT ANNOS XXXIII, completes the tombstone list before us to-day.

I add what seems to me an important testimony to the knowledge of the Epistle to the Ephesians. In October, 1878, in digging at the excavated Roman castrum at South Shields, a fine tombstone to the memory of a lady was discovered. She is seated in an open trellis-work chair, raising with her right hand the lid of a box, with her work in her left hand, and the qualum with its skeins of wool standing at her left side. There is a bilingual inscription, in Latin and Palmyrene:

D M REGINA LIBERTA ET CONIVGE BARATES . PALMYRENVS . NATIONE . CATVALLAVNA . AN . XXX,

the Palmyrene being interpreted by Professor Wright, "Regina freedwoman of Bar'ate (? Barates). Alas." I only remark here the Jewish or Aramaic character of the husband's name. But at the same station, and in a way which was satisfactory to those who record it, were turned up numerous jet articles, with fragments and chips, indicating a manufactory of these things. One, about two inches in height, of the shape of a tombstone, represented a man falling head-foremost, and underneath, in letters not later than the fourth century,

INSID IIS . DI ABOLI.

These are, changing the ablative into an accusative, the words of the Vulgate in the well-known passage in Ephesians vi. 11; and

if further confirmation were needed as to the Christian character of this object, it may be found in the discovery of two Latin crosses at the same station, one of stone, the other of jet, both bearing on the horizontal bar REMO. Evidence can be given as to crosses portable, made by goldsmiths and other artificers at

this period of the Church's history.

At the recent meeting of the Royal Archæological Institute at Canterbury, the Church of St. Martin was, of course, one of the most important places visited. Its reputation as a Roman building has led to an unusually careful examination of the present structure, as well as of the now-exhumed foundation of a destroyed adjunct. The definite testimony of Bede, and the salmon-coloured plaster, will go far in the opinion of many to establish the Roman character of St. Martin's. We are promised a full treatment of the subject in the course of the present year, in *Archæologia Cantiana*, and await the result with much interest.

More can be said about the building claimed as a church, discovered at Silchester, in 1892, by Messrs. George E. Fox and W. H. St. John Hope. It has received a full notice in the account of their excavations, published by the Society of Antiquaries in the following year. From its small size it cannot be a basilica, the necessity for which is precluded by the existence of one of those edifices not far off; while the apse, aisles, and narthex point to its ecclesiastical character. Contrary to our present ideas, the apse is at the west end, the pavement is unbroken in level, and the altar appears to have stood on a panel of fine mosaic in front of the apse. There are traces of a stone or marble altar having taken the place of the earlier wooden table, and of coloured plastering on the walls.

The realistic side of theology has its mystic and spiritual use. These dim and blurred traces of the past reveal to us our fathers in the faith as true followers of those who by faith and patience in still earlier times inherited the promises. And as thus we regard them, faithful unto death, as Alban and Aaron and Julius; travel-weary, as Eborius and Restitutus and the men of 314, or, it may be, of 325; not ashamed to be called a Christian, like Porius; resting in peace, like Cunais;

warned against the wiles of the adversary, like the nameless owner of the little jet ornament at South Shields, we may catch something of their spirit, and run with renewed patience the race set before us.



The Account-Book of William Wrap.

By the Rev. J. T. Fowler, D.C.L., F.S.A. (Continued from p. 317, vol. xxxii.)

1594.

Fo. 31v. Bought of Robert Eatenfilde the 20 of June 1594. Imp'm' one pece stroye coler seckinge, xxvs. vid.; e iiiili blacke thred, vis.; su' xxxis. vid.

Bought of Jhames Simpson myles burton ma' the 25 of June 1594. Imp'm' i pece cre. duraunce, xxxiis.; Ite' i pece purpell buffinge, xviijs.; Ite' i pece grene buffinge, xvijs.; Ite' iiili blacke fringe, xis.; su' iiili. xviijs.; restes to paye for iiili blacke

fringe, xis.; payd And quit.

Bought of Robart Egglefilde the 25 ot Julye ano d'ini 1594. Imp'm' i pece of white sekeinge, xxviiis.; Ite' iili of black thrid, iiis. iid.; Ite' iiij dossen of enkle mydle, iis. viiid.; Ite' i dossen of fine smalle enkle, viiid.; Ite' i pece gren striped seckynge, xxs.; su' is Just xxxs. (xxiiijs.) vjd.; whereof he Rhe, xxxxxiiijs.; iiii gr' silke but', vs.; e iiii gr' hair but', iiis.; e v gr' thred but', iijs.; e iii dosse' Inkles, iis.; su' is iiili. iis. vid.

Bought of Miles Burton the 29 of Julye Anno domi 1594. Imp'm' i pece of Oringe Taunie buffing, xviiis.; Ite' i pece of black buffing, xvis.; Ite' ili of blacke fringes, iiis. viiid.; Ite' ili of fine cre. fringe, vs. viiid.; sum is Juste xxxxiijs. iiiid.

Bought of Raife eatenfeilde the 8 of august 1594. Imp'm' 1 pece Iennes fustyo', xxiiijs.; Ite' d: a gr' statute lace, xs.; payd

e quit.

Bought of Myles Burton the 18 of septebr 1549. Imp'm' i pece cre. duraunce, xxxs. vid.; Ite' i pece wrought valure, xxiiijs.; Ite' i pece gren bufinge, xviis.; Ite' iiili ff² blacke

¹ Buttons. ² Doubly fine.

fringe, xiis.; Ite' iili myngle fringe, viis.; su' iiiili. xs. vid.; payd in p't the 3 of octobr

1594, iiili..

Bought of raife Eatenfilde the 6 of octobr 1594. Imp'm' d.li d: ounce f. tufte bindyng, xiis iiijd.; Ite' ili pecinge thred, iis. vid.; Ite' i pece cape rybo', iis. iid.; su' xvijs. id.; Ite' i gre golde buttons, xiis.; Ite' a dosse silke e golde longe buttons, xiis.; Ite' a dosse e a d: longe silke buttons, vis.; Ite' v elles f. holland at 4s. xd., xixs. xiid. (sic); Ite iij dosse' diamond lace, iiis. iijd.; su' iiili. ixs. viiid.; payd in p't viiis.; Ite' d: a grosse of f. cardes, xviis.; Ite' I gr' statute lace, viis. vid.; su' is iiijli. xviis. iid.; Ite' q'li senymo', vs.; Ite' a dosse e a d. matteres cardes, iiis. iiijd.; Ite' d a pece russet Jennes, xis. vid.; e ii gr' silke buttons, viiis.; Ite' one pece calyco, ixs.; su' vili. xxiiis.

Fo. 32. Bought of a cove'tre ma' the 24 of octobr 1594. Imp'm' ili fff² cove'tre thred, iiis.; Ite' iili blacke fringe, vis. iiijd.; su' xis.

iiijd.

Bought of Robt eate'filde the 5 of Decebr 1594. Imp'm' 1 pece white seckynge, xxiiis.; Ite' 1 pece stroy-coler, xxis.; Ite' iii gr' thred

buttons, iis.

Bought of Robt eate'filde the 16 of Januarij 1594. Imp'm' 1 pece whit sekynge, xxiiiis.; Ite' 1 pece ashe coler, xxiis.; Ite' iij gr' thred buttons, iis.; Ite' ijli b. (black?) thred, iiis. iiiid.; su' lis. iiijd.; Ite' vli twiste fringe, xxiis.

Bought of Jhon Gill the 13 of fabruarij 1594. Imp'm' i pece cre. duraunce, xxxis.; Ite' i pece blacke buffinge, xvis.; su' xlviis.

Bought of Mr Norto' the 21 of fa. 1594. Imp'm' iiii yeardes silke rashe, xs. viijd.; Ite' xiiij oz iii q'tis tufte binding, xviijs. iiijd.; Ite' iili oz p a d: ff Knite lace, iiiis. ijd.; Ite' iili large senymo', xis.; Ite' dli.. mace, vis.; Ite' i dosse' primers, iis.; Ite' vii oz kringe4 candles, iiiid.; Ite' iij dosse' thrid knit lace, iiijd.; su' is liis. xd.

Bought of Robt eatenfilde the 27 of fa. 1594. Imp'm' one pece stroye coler seckings, xxs.; Ite' one pece stripd grene, xxs.; Ite' q' a webester one pecce harde' (harden),

viiis. iiijd.; su' xlviiis. iiijd.; Ite' one pece harde' the 6 of mrch, viiis. iiijd.

Bought of robert eatenfilde the 13 of m'ch. 1594. Imp'm' 1 pece f. purple buffinge, xxs.; Ite' ii gr' silke buttons, iijs. vd.; Ite' ii gr' thrid tufte buttons, xvid.; Ite' i gr' thrid buttons, viid.; su' xxvs. iiijd.; Ite' i pece f. stroy coler seckyng, xxvs.; su' ls, iiijd.

Bought the 15 of Mrch 1594. Imp'm' i gr' brode garteringe, xvs.; Ite' ili f. cove'tre thred, vs.; ed: dossen french penes, iiis. iiijd.; su' is xxiijs. iiijd.; Ite' i pece gren buffynge, xvijs.; Ite' i pece purple buffinge,

xviijs.; su' xxxvs.

Fo. 32v. Bought of Raife Egglefield the 15 of Noveb 1595. Imp'm' I pece colerd mela' at iiij/i. iis.; Ite' d; a pece stroye colerd holmes, 2 xviijs. vid.; Ite' i pece billament, ixs.; Ite' vii oz spa. silke L.3 at 24, xs.; Ite' iiij oz colerd silke, viijs.; Ite' iiij oz L. silke, iiis. iiijd.; Ite' i gr' L. at 10, xs.; Ite' i gr' statute L. at 9, ixs.; Ite' ili cove'tre thred, vs. iiijd.; Ite' 1 gr' f. silke pointes at 8, viiis.; Ite' 1 gr' at 7, viis.; Ite' 1 gr' rounde pointes at 4 · 4 ·, iiiis. iiijā.; Ite' r pece purple bufinge, xixs.; Ite' iiij gr' cordid buttons, iiiis.; Ite' iiij oz q't lacing silke, iiiis.; Ite' iili b. (black?) fringe, vs. iiijd.; payd in p't, ixli. viis.; Ite' xv ounce tufte lace, xviis. xd.; Ite' iiij oz londo' silke, iiis. iiijd.; Ite' iij dosse' br. (broad?) garteringe, iiijs.; Ite' d: gr' at 13, vis. vid.; Ite' i gr' at 11, xis.; Ite' i gr' thred poynte, xxd.; Ite' ij gr' buttons, vis. iiijd.; Ite' i dosse' pinnes no 6, viis.; Ite' i pound blacke fringe, iis. viiid.; payd to Jho Egglefilde the 8 of Decebr 1593 in full payment, iiiili. (To be continued.)

TO F

Publications and Proceedings of Archwological Societies.

PUBLICATIONS.

The first part of vol. xiii. of the Collections of the SURREY ARCHÆOLOGICAL SOCIETY has been issued. Besides a record of the proceedings of the

¹ I cannot explain this term.

² Trebly fine.

³ As these were only 2d. each, they were probably ABC books or sheets for children.

⁴ Meaning unknown to me.

¹ Pens

² A knowing correspondent thinks she has heard holland called "holmes."

³ Lace.

society, it contains the following papers: (1) "Dunsfold Church," by Mr. J. Lewis André, F.S.A.; (2) "On Some Roman and Saxon Remains found at (2) "On Some Roman and Saxon Remains found at Croydon in 1893-4," by Mr. F. Ll. Griffith (this paper is reprinted from the Proceedings of the Society of Antiquaries); (3) "An 'Urn Field' at Merrow," by F. Lasham; (4) "The Tabard Inn, Southwark, The Queen's Head, William Rutter, and St. Margaret's Church," by Mr. P. Norman; (5) "Surrey during the Commonwealth," by Mr. G. W. Kershaw; (6) "The Church Plate of Surrey" (continued), by the Rev. T. S. Cooper; (7) "Surrey Wills," communicated by Mr. F. A. Crisp. The part is freely illustrated and of much interest. We do not, however, see that Mr. Cooper's inquiries have been rewarded on this occasion by any remarkable disrewarded on this occasion by any remarkable discovery, although a fine cup at Kingswood, of the year 1675, is worthy of notice.



Part xlviii. of Archæologia Æliana has also been issued. It contains a most exhaustive and valuable paper by the Rev. J. F. Hodgson on the present chapel at Auckland Castle, which he conclusively proves to have been the original aisled hall of the castle, refashioned by the munificent Bishop Cosin after the Restoration. Mr. Hodgson's paper is one of the most painstaking pieces of work to be met with anywhere, and it is well and very fully illustrated. Besides this pièce de resistance there are papers by Mr. Sheriton Holmes on a portion of the town wall lately brought to light; another by Mr. F. W. Dendy on six of the "Chares" which were destroyed by the fire of 1854, and one by Dr. Embleton on "Ruins of Buildings once existing on the Quayside." Of the interest attaching to an old photograph which is reproduced in connection with Mr. Dendy's paper we have spoken elsewhere.

PROCEEDINGS.

A very successful excursion was made on September 30 by the members of the NORFOLK AND NORWICH ARCHÆOLOGICAL SOCIETY to several churches of more than ordinary interest. The party was accompanied by the president of the society (Sir F. G. Boileau, Bart.), the Rev. Canon Manning, Dr. Bensly, and Mr. Bolingbroke, the secretary. The first of the churches visited was that of Swannington, a building dedicated to St. Margaret, and which possesses features of interest in the south porch and elsewhere. In panels of the plinth of the porch, worked in flint and "I.H.S. Nazarenus." The spandrils of the doorway contain on the one side a representation of a dragon bursting asunder, after having swallowed St. Margaret, who, however, is represented as emerging in the presence of an angel from a hole in its back. The other panel represents the beheading of St. Margaret, the head being removed some distance from the body. On passing through the porch into the church there is visible, on the south face of a south-east pier between the aisle and nave, the remains of a large wall-painting of St. Christopher, with a mighty staff in his right

hand and the Infant Saviour on his left shoulder. An object which seems to have been a holy-water stoup is preserved in the vestry. It is of stone, and on three of its faces are curious carvings. One is that of a dragon with many serpent characteristics; another St. George about to encounter it; and a third, St. George thrusting his lance down the dragon's throat. Dr. Bensly read some notes on the church by Mr. T. D. Atkinson, architect. The earliest parts of the present building are supposed to be remains of an Early English Church. The changes by which the church assumed its present appearance were probably made between 1340 and 1350. An aisle was built on the south side with the present south arcade, and the beautiful tower piers and arches were built to replace the destroyed west end of the nave. In the tower piers there is a very marked change in the character of the work, which might have been suspended for a long time because of the Black Death. There are indications of a ringing gallery under the tower. The rood-screen, lately removed (!), had a loft over it, and the screens which enclosed the chapels at the east end of each aisle were most likely erected in the fifteenth century. From Swannington the members proceeded to Witchingham, where Mr. Bolingbroke read an ex-

haustive paper on the church.

Mr. Bolingbroke began by calling attention to the rich frieze of the roof, the elaborate poppy-heads of some of the seats, and the mellowed colour still to be traced upon the beautiful font, as reflecting some of its sixteenth-century ornate splendour. Connected its sixteenth-century ornate splendour. Connected with the parish were the families of Witchingham, Middleton, Breton, and Berney. The churchwardens' accounts show that legacies were made to the parochial guilds of St. Mary and St. John the Baptist. Gifts were also made to at least a dozen lights in the church. Church ales at Easter and Hallowmas, Lord drinking at Christmas, and wrestling and shooting, brought in profits to the church. Numerous and costly were the church goods 350 years ago. The only piece of stained glass remaining in the church is that bearing the arms of New College, Oxford, in the east window. The high altar of stone was sold in 1559, and for £1 os. 3d., and replaced by a wooden table. In 1558 the altar had a frontal of stained cloth representing the Assumption of the Virgin. A cross stood on the altar, and before it two candlesticks of latten. During the years 1556-58 a light was kept burning before the Blessed Sacrament on the high altar by one Buttifant's wife, who received 1s. 8d. a year for her trouble. In the south wall of the chancel is a lowside window that was fitted with wooden shutters, whose hinges are left. Mr. Bolingbroke proceeded to give an account of various vestments, copes, plate, vessels, crosses, censers, manuals, antiphoners, psalters, and processioners, belonging of old to the church, the majority of which disappeared on the accession of Queen Elizabeth. The entrance to the loft of the rood-screen is still to be traced. The rood-screen had evidently images of St. Mary and St. John upon it, as there are entries in the church books relative to the repair of those figures. In 1560 sevenpence was expended in plucking down the rood-loft, but the screen probably remained till 1674, when it was re-placed by another, given by Oliver le Neve, on which was the following quaint inscription:

"Christ eates the Pascoll Lambe, a sign to bee Of the New Covenants most sacred tie; His Flesh He gives us t'eate and bloud to drinke, And when we do it, bids us on Him thinke."

The church has north and south aisles, and a beautiful Perpendicular roof, spanning a Tudor clerestory of seven windows. The roof springs from carved stone corbels representing angels and grotesque heads alternately, and the frieze is especially rich. An altar stood at the east end of each aisle, one of St. John and the other of St. Margaret. The fine Perpendicular font has in its panels boldly carved representations of the Seven Sacraments and of the Assumption, while the shaft bears sculptures of the Crucifixion, etc. Under a faculty granted in 1793 the whole of the interior of the church was overhauled. There are in the nave a few brasses. At the west end of the church are two old chests, probably of the sixteenth century.

The next place visited was Reepham, where originally three churches stood in one and the same churchyard, viz., Reepham, Hackford, and Whitwell. Of these Reepham and Whitwell still remain, and are conjoined. Hackford Church, except a small fragment, has disappeared since 1533. This fragment stands at a short distance from the two remaining

churches.

Whitwell Church, dedicated to St. Michael, has not a very interesting interior, but in Reepham Church there is a very fine recumbent monument of a Knight Templar of the Kerdiston family, in armour, with his hands and legs crossed. At the base of the monument are effigies of boys and girls. The knight lies on some rockwork, with a lion at his feet. Other monuments mentioned in Blomefield were noted. But special attention was directed to a stone crucifix which for a long time stood at the north-west end of the chancel. On being taken down, it was found to have representations of the Blessed Virgin and St. John on each side of the crucifix, and on the reverse there was found a central figure of St. Michael, with St. Andrew and his cross on the one side, and St. Christopher with the Holy Child on his shoulder on the other.

At Cawston the party inspected that very fine and well-known church, which, with its freestone tower, is one of unusual interest. The special interest of this church is not so much its growth as a building as for what it contains of the old furniture and The rebuilding of the church was begun in the fourteenth century, and was completed on the south side, as usual, late in the fifteenth century. It shows the custom of building a tower and then joining the church on to it. The westmost bay of the church is wider than the others. There was an earlier nave with a western end, but to prolong the nave the architect built over to the tower a bay of more than ordinary width. In regard to fittings Cawston Church is one of the most perfect in its religious furniture anywhere, with the exception, perhaps, of Sall. This tells of the prosperity of the middle classes, who cared for their parish churches during the fourteenth, fifteenth, and sixteenth centuries. It is somewhat curious to note that the prosperity of these churches seems to have

continued without interruption, and care to have been taken of them, notwithstanding the Wars of the As the chancel of this church once suffered from fire, the existing work is comparatively modern. There is some early stall-work. The plan of the church is characteristic of the neighbourhood, with little low transepts such as are to be found in so many Norwich The screen, of the end of the fifteenth century, has on it a great deal of painting, and an enrichment of its moulding is gesso work. There are on the panels St. Agnes, with her throat cut and a lamb at her feet, the twelve Apostles, and figures of saints, and on the doors the four Doctors of the Church. On one panel is the figure of that singular person, Sir John Shorne, who conjured the devil into a boot. This is shown on the panel, but the devil has been obliterated. The great rood stood on a beam under a canopied roof. Instead of the angels which decorate the hammer beams of this church being carved out of the hammer beams, they are perched upright on their ends. This is peculiar. When the order came for destroying the rood, some of the people who gave the work were, no doubt, still living; at any rate, there are signs of a desire to preserve some of the figures of the rood. Thus, the people who wanted to preserve it took down one of the angels off the hammer beams and put in its place the figure of Our Lady. There it still remains on a hammer beam near the east end of the north side of the nave. It was, it may be surmised, placed there surreptitiously as an architectural ornament, and was thus preserved. But that is not all which has been left of the rood. The rood was a great cross with a figure of Our Lord in the centre, and in the decorations at the end of the cross were medallions, with badges of the four Evangelists. These were prebadges of the four Evangelists. These were pre-served by being fixed on the roof. The destruction of the rood may have taken place in the time of Edward VI.; it is more likely to have been in the time of Elizabeth, when a royal order was issued for the removal of rood-lofts. In an inventory of goods in the hands of churchwardens in 1813 it is stated that there is a Communion-cup, with a box of leather to keep it in. Both are still in the church. The box of leather is the finest example extant of an old cuir bouilli case. When the subject of this box was brought before the Society of Antiquaries some years ago, Sir Augustus Franks described the arms on it as ago, Sir Augustus Franks described the arins on it as (1) those of Bassingbourne; (2) a lion rampant guardant; (3) Clinton; (4) Ufford; (5) Zouche; (6) Hastings; (7) Fulton. On the top is a fine griffin, with the text, "Jesus Nazarenus Rex Judæorum," which was supposed to be a charm against thieves. The same inventory mentions "one great lectern and one lesser." The great lectern stood in the middle of the choir; the lesser lectern, which stood by the altar for the singing of the Gospel, was apparently continued till the date of the inventory. Mention is made of a carpet of satin orphreys, green and white, i.e., an altar-cloth, showing that mediaval stuff was used up for that purpose. Then there was a bierused up for that purpose. cloth of worsted. There There are several chests. The inventory also mentions the upper part of a pair of organs, and two pairs of bellows for the organs; a pair of organs "bestowed in the steeple windows;" two pieces of rood-loft, and an old table. Thus in

1613 pieces of organ, evidently the mediæval organ, were scattered about the church. They seem to have disappeared in the early part of the reign of Elizabeth. As the parish organ nearly always stood on the roodloft, when the order was issued to remove rood-lofts the organ had to come away also. At the west end of the church is a gallery, on which runs a quaint inscription:

"God speed the plow,
And send us corn enow,
Our purpose for to make;
... plow lite of Sygate.
Be mery and glade,
Wat good ale this work made."

At first it was thought this meant that the gallery was erected out of the proceeds of the church ale, but in the inventory of church goods of the sixth year of Edward VI. it was found there was as churchwarden one Robert Goodale. Perhaps he or his father put up that gallery. There are also references to chime in the tower. In the gallery is an opening, no doubt intended for the weights to run in, and also possibly for the wires and chiming gear. The alms-box has a curious bell-shaped arrangement within to dodge people who wished to get anything out of it by means of a wire. One of the most curious things in the church is a picture on the east wall of the transept. The subject is that of a female figure seated enthroned with those of two donors, one on each side, from each of which proceeds a long riband, on which there are some inscriptions. One of them, partially made out, runs:

"Whenso come be day or be night You praye to God we make Gode ende That he bothe wt his blod so brith You pray Mary Heavin's queyn That ye bar ye barn that blisful fode Yt this bliss we may (obteyn) Yt for us all dyd on rode.

In the transept is a piscina, with a wild man upon it. The pulpit is a peculiar piece of furniture of the fifteenth century. Over the north door is a Latin inscription recording that Robert Oxborough built the "aisle." Most of the objects of interest in the church were pointed out by the Rev. T. H. Marsh, the Rector, and Canon Manning.

From Cawston the party proceeded to Sall, where the stately church of that parish was inspected. It consists of a chancel without aisles, but has two little transepts, which belong to the aisles rather than to the whole church, and were put in because altar space was wanted. There were five altars. Before and about the altars were many tombstones, some of which are in position, while some have been removed and put against the wall. One represents a corpse in a winding-sheet; it has a memento mori inscription, to the effect that "Friend, whoever ye be, as ye now me see, so shall ye be in such degree another day." The nave is unusually wide and high. All the old roofs are in excellent order. The font, on which are the Seven Sacraments in relief, has its cover worked by a painted crane from a west gallery. The painting on

the crane is of uncertain date. The stalls, with carved seats, in the chancel remain in unusually perfect order; but the screen has been cut through. All the chapels were screened off. Remains of the chapel screens have been made up into pews. The pulpit, of the same date as that at Cawston, occupies its original position, on the south side of the nave. It stands on a huge log of timber with some curious holes in it. Over each porch is a chamber, traditionally knownthat on the south as "The Soldiers' Chamber," and that on the north as "The Old Maids' Chamber." Two corbels on the wall at the east end of the nave belonged to the rood beam. A cornice was carried across, intended to form a canopy for the rood. The nave roof is painted, although the colours are faded. The space between the rafters is powdered with the Holy Name, and with that of St. Mary in red and white. Below is a coved cornice, on which are angels painted. In the transepts are two most beautiful unpainted ceilings.

At the monthly meeting of the SOCIETY OF ANTI-QUARIES OF NEWCASTLE-UPON-TYNE, held on September 30, Dr. Hodgkin gave an account of the excavations in progress at the Roman Camp at Ardoch, in Perthshire. Dr. Hodgkin also read a communica-tion from Mr. Haverfield dealing with some important results ascertained during the recent excavations in the Vallum near Birdoswald and Carrawburgh. Mr. Maberley Phillips exhibited some money weights, and read a short paper on the subject. The subject of the obligation on the part of the Corporation of Newcastle to repair the tower and lantern of the parish church of St. Nicholas was discussed in a paper by Mr. A. E. Ingledew, in which he said that it was rather an open question, but the weight of testimony appeared to be that the Corporation of Newcastle were liable, they having time immemorial actually done the repairs under a feeling of obligation. It was an acknowledged fact that church bells in the olden times were instrumental in guiding the traveller to his home in the dark nights. The church of St. Nicholas was not only of service in that way, but also as an inland lighthouse. Tennant spoke of the pathless moors of the neighbourhood in the past century, and many a wayfarer who traversed them had reason to bless the lantern of St. Nicholas in the nights of old. History recorded the prominent part which the steeple played during the Civil Wars, when the Scots besieged the town, and the incidents tended to show that the Mayor and burgesses had at that time the control, management, and maintenance of the lantern and tower. Again, one of the bells in the steeple was known as the "common" or "thief and reever" bell, in consequence of its having been used for the double purpose of summoning the burgesses together for public business, and, it is supposed, of informing thieves, horse, cattle, and sheep stealers on the eve of the annual fairs that they were permitted to enter the town, and that no troublesome questions would be asked. The free burgesses appear to have had some control over the bells and belfry, and they at the present time meet in guild three times in a year, and at their meetings the Mayor presides, and is usually accompanied by the Sheriff and Town Clerk. They are summoned to

attend the guild meetings by the tolling of the "common bell," and on these occasions the ringer is not paid by the freemen, but by the Corporation. The Corporation possess, or did possess formerly, keys to the belfry, and they can require the bells to be rung when they think fit, so long as they do not interfere with Divine Service. For the use of the bells the Vicar and churchwardens have contended, and still contend, that the Corporation are responsible for the keeping in repair of the lantern or steeple. So far as can be ascertained, the Vicar and churchwardens have never admitted any liability to repair the lantern, and when, in 1829, it was discovered that the belfry was dilapidated, a letter was sent by the churchwardens of St. Nicholas to the then Town Clerk of Newcastle on the matter.

Afterwards counsel's opinion was taken by the parishioners, the advice being that the Corporation were legally liable. Mr. Ingledew, in his paper, gave further instances of the Corporation having done repairs to the steeple when they were necessary, and concluded by saying that, as the repairs to the belfry and lantern had now been proved to be cast on the burgesses of Newcastle, it was hoped that the Corporation would always maintain and keep the same in thorough repair.

A paper on the parish of Esh, by the Rev. W. Stuart White, was then read.



Reviews and Motices of Mew Books.

[Publishers are requested to be so good as always to mark clearly the prices of books sent for review, as these notices are intended to be a practical aid to book-buying readers.]

SHAKESPEARE'S TOWN AND TIMES. By H. Sowden Ward and Catharine Weed Ward. Cloth, 4to., pp. 178. London: Dawbarn and Ward. Price, 7s. 6d. net.

The many problems connected with Shakespeare, and the general attractions of Stratford and its neighbourhood, naturally form the theme of an extensive and extending literature. Few, if any, more beautiful books of the smaller kind about Shakespeare and Stratford have appeared than the book whose title is at the head of this notice, and, as becomes the editors of the Photogram (who have written and compiled it), the book is copiously supplied with a series of excellent photographic illustrations. We are not aware that the book adds in the letterpress much to our existing knowledge about Shakespeare, or his family and social history. Indeed, the authors do not claim that it does, but they have endeavoured to clear the ground from the legendary accretions which have gradually entwined themselves round ascertained facts. They modestly say in the introduction, "Our task has been a simple one—to write in plain words the tale of Shakespeare's life, to picture what remain to us of the scenes that Shakespeare saw.

There are 'lives' more learned than anything we can attempt, and illustrations of Shakespeare's town more picturesque than anything we can make. But the pictures are too often fancies, the 'lives' too seldom distinguish between fact and theory. We have tried to be simply true, and, while giving our own deductions from some of the facts, to keep the facts themselves distinct." This, we need scarcely add, is exactly the spirit in which the modern antiquary goes to work, and it is the only right way of really settling problems of history and archæology. The authors further add: "It is to be regretted that no photographic record could have been made a century or more ago, for the vandal and the 'improver' have made sad havoc of Shakespeare haunts. But as the changes are still in progress, our photograms may be useful in years to come in reconciling the contradictions of more beautiful, but less accurate, repre-

These two sentences which we have quoted are quite sufficient to recommend the book to antiquaries. We may add that in a few instances the authors have reproduced old photographs taken in 1858 by H. P. Robinson. These show Shakespeare's birth-house as it was before it was acquired for preservation by the trustees, and also the Middle Row in Stratford, the latter being, or having been, an exceedingly picturesque and quaint series of houses—now "improved" off the face of the land. As regards the subjects illustrated, there is not a nook or corner, which may possibly be connected with Shakespeare or his contemporaries, of which one or more photographs are not given. There is, in fact, a photograph on nearly every page of the book, which is, it may be added, admirably printed in clear type on smooth paper. A better book of its kind is impossible.

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English Minstrelsie. Edited by S. Baring Gould. Vol. V. Cloth, 4to., pp. xxvii, 113. Edinburgh: T. C. and E. C. Jack. Price Ios. net.

As we have spoken so fully in commendation of the earlier volumes of English Minstrelsie, we need say little of the fifth volume, which seems quite equal in interest to its predecessors. It contains the following among other well-known old songs: "Once I Loved a Maiden Fair" (early seventeenth-century); "Burton Ale" (circa 1710); "Alas for the Days that are Gone!" (1774); "Joan's Placket is Torn" (1685); "Daughter, you're too Young to Marry" (1739); "The Invincible Armada" (1786). Concerning this latter song the editor draws attention to a curious result of the Armada still existing at Saltash, the harbour dues of which affect a large portion of Plymouth waters. It seems that the dues are 1s. for every English vessel that enters, and two from every foreign keel that anchors in the Hamoaze, while 7s. are charged upon every Spanish vessel. The sum was raised by the Corporation from 2s. to 7s. after the Armada, and has so continued to the present day!

Prefixed to the notes to the songs is a full and interesting historical sketch (with illustrations) by the Editor on "The Concert Halls, Gardens, and Singare"

WILTSHIRE NOTES AND QUERIES. Vol. I., 1893-1895. Cloth, 8vo., pp. 612. Devizes: George Simpson, jun.

We have from time to time mentioned with favour the separate numbers of Willshire Notes and Queries as they have been issued. We have now the completed first volume of the magazine before us, and it fully corroborates the approval we have expressed on the different portions as they appeared. The volume is one of which both the editor and the publisher may be very well content. It covers the period of the three years 1893, 1894, and 1895, and forms a good thick volume, full of valuable matter relating to Wiltshire. The book is well illustrated with more than fifty pictures, many of them of full-page size; and (besides a number of odds and ends and questions and (besides a number of odds and ends and questions asked and answered) there are several good papers on local archæology. We may mention the following papers or subjects contained in several papers as being of more or less especial value: "Wiltshire Folk-Lore," "Archbishop Laud's Visitation of the Dean and Chapter of Sarum in 1634" (a very curious and interesting document of considerable length), "A List of Wiltshire Patentees," "Knighthood Compositions for Wiltshire," "The Salisbury Giant 'Hob-Nob'" (with a photograph, and a quotation from Mr. I. Ward's paper to our own pages on the from Mr. J. Ward's paper to our own pages on the subject), "Byegone Days," "Annals of Purton," besides many others. If other local "Notes and Queries" can be maintained at the same standard of excellence as those for Wiltshire, they will do an excellent piece of work. Several others might be named not at all behind in the matter, and a useful future seems to be marked out for this character of magazine. There is a full index at the end. 1

SCOTTISH POETRY OF THE EIGHTEENTH CENTURY. Vol. I. Edited by George Eyre-Todd. Cloth, 8vo., pp. xii, 234. Price 3s. 6d.

The poetry of Scotland during last century is one of those border subjects which only by courtesy appertain to the notice of the Antiquary. The eighteenth century was, of course (without even including Burns), a peculiarly rich one in regard to Scotch song, and we cannot do better than refer to the discriminating remarks which Mr. Eyre-Todd makes on the subject in the introduction to the book. It is published as one of the volumes of the "Abbotsford Series" of Scottish poets, and it is intended that it shall form a comprehensive anthology of the eighteenth-century poetry of Scotland, and "render the bead-roll of the poets as complete as possible." In order to do this satisfactorily, the work is to be divided into two volumes, of which the present is the first instalment. It includes the following names, some of them very much better known than the rest, specimens being given of their work, with a brief memoir of each pre-fixed in each case: Lord Yester, Lady Grizel Baillie, Lady Wardlaw, William Hamilton of Gilbertfield, Sir John Clerk, Allan Ramsay, Robert Crawford, Robert Blair, the author of "Albania," Alexander Ross, James Thomson, David Mallet, William Hamilton of Bangour, Alexander Webster, George Halket, Alison Rutherford, John Wilson, Sir Gilbert Elliot, Tobias Smollett, Adam Skirving, William Wilkie, Thomas Blacklock, John Skinner, John Home,

Jean Elliot, John Lapraik, William Falconer, William Julius Mickle. The work seems to us well done, and quite up to the standard of the earlier volumes of the The author's preliminary remarks on the Scotch poetry of last century are much to the point.

[Notices of several other books are held over.]

The October number of Middlesex and Hertfordshire Notes and Queries is an exceptionally good one. It contains, inter alia, a facsimile of the earliest known cheque, drawn April 12, 1671, by Alderman Edward Backwell upon Charles Duncombe. A note concerning it by Mr. F. G. Hilton Price is appended. Other papers which may be mentioned are: "Relics of Old Hackney"; "Vestigial Practices at Feasts"; "The Site of the Smithfield Martyrdoms"; "The Market Cross at Hertford": "The Lord Mayor's Procession in 1584," etc.



Short Potes and Corresvondence.

A FRAGMENT OF FORGOTTEN HERALDIC

In addition to what has been written in the September number, p. 287, under the above heading, it is interesting to note that "a person of the name of Mackworth" was in the retinue of Lord James Audley, at Poictiers 1356 in 20th Edward III.," according to Pilkington, who quotes Stow's Annals. "In the 27th Edward I., the Touchets held Merton," i.e., Markeaton, which was next neighbour to the estate of the Mackworths, i.e., Mackworth Castle. There is in the College of Arms a grant of arms from John Touchet, Lord Audley, dated from his manor of Markeaton, Derbyshire, August 1, 1404, which would be about 5th Henry IV., or forty-eight years after the battle of Poictiers, to John Mackworth and Thomas, his brother, who are described as "valiant men," the following arms: "Sable et ermeyne, partez et indentez, avec un chevron de goules, frettez d'or, de les armes D'Audeley, et une creste, c'est assavoir, une eelle (aile) q'est pr celle n're creste D'Audeley, de quele eele les plumes sevront des colours de sable et d'ermeyn." So that there is here another example of the custom of conferring augmentations of arms upon esquires for valour. The arms of Mackworth were: per pale, indented, sa, and ermine. D'Audley added to it a chevron gules, fretty or, thus taking the chevron gules from the arms of Touchet and adding to it the fret of the Audleys. The arms of the Touchets were ermine, a chevron gules.

GEORGE BAILEY.

NOTE TO PUBLISHERS .- We shall be particularly

obliged to publishers if they will always state the price of books sent for review.

It would be well if those proposing to submit MSS. would first write to the Editor stating the subject and

manner of treatment.